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OCTOBER 1994, VOLUME II, NUMBER 10  
OS/2 FOR CORPORATE AMERICA



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page 33

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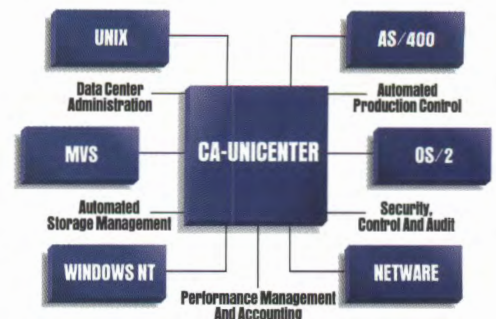


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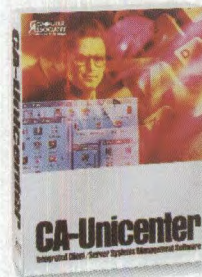


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THE MAGAZINE FOR OS/2 PROFESSIONALS

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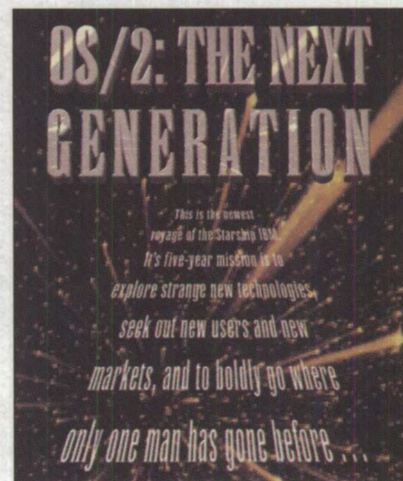
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THE MAGAZINE FOR OS/2 PROFESSIONALS

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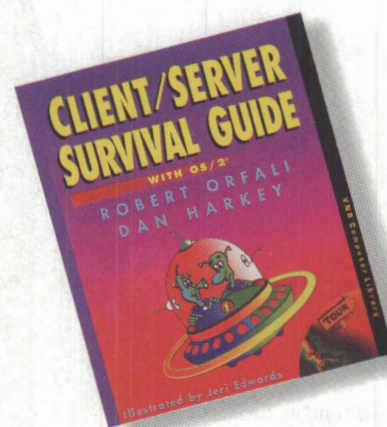
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# UNTIL NOW, YOUR CHOICES FOR OS/2 BACK-UP WERE TAKE IT, OR LEAVE IT.



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Chenin Potat 1989  
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**New Version!**



# Warp Launches

**W**arp is here—and it's coming out swinging. IBM will be wielding a \$50 million club to launch its most ambitious effort yet: OS/2 version 3. The fireworks ignite October 11, just days before this issue reaches your mailbox. And what a launch it will be.

PSP has approached this release with a double whammy of market prowess. It is finally going after the mass market. Austin is keenly aware that this is its last chance to derail Chicago before 1.uh-oh emerges next year with a Romulan-strength marketing armada.

But this time, there is something different that will give PSP a fighting chance. First, the product is unquestionably the most powerful, elegant, user friendly desktop operating system in the galaxy. After years of battle testing in corporate America, the product is at last destined for the Windows-using masses. In fact, version 3 does away with the differences between regular OS/2 and OS/2 for Windows. They are now one and the same. The entire Warp marketing effort is geared toward Windows users.

Second, IBM worldwide is pulling out every marketing stop it has. Armonk is involved as never before. Lou Gerstner personally renamed the product OS/2 Warp just days before the launch. And this time, IBM is putting its money where its mouth is: TV, radio, billboards, direct mail, publications, retail programs, OEM efforts. And it's all happening simultaneously around the world.

We are proud to bring you the first exclusive details about the Warp launch—as we know them on September 30, just two weeks before the October 11 launch. Our package includes Editor Brad Klier's incisive testing of the Warp late betas; my insider scoop on PSP's warplans against Windows and its chances for success; an *OS/2 Professional* interview with Dan Lautenbach, PSP's point man for the entire Warp launch; a fax poll for our readers to react in real time to the Warp launch; and finally, OS/2 Express allows our readers to be the first people on earth to reserve copies of OS/2 Warp version 3, which will ship in late October.

OS/2 Express will even allow readers to reserve advance copies of the LAN Client version coming out next month.

Certainly, anything in IBM's strategy can change, from the advertising plan to the name of the product itself. I can testify that the people in Armonk, Austin, Boca Raton, Dallas, Los Angeles, and Somers have been working day and night to get it perfect. And this time, there is accountability.

Covering this momentous launch has been a challenge for *OS/2 Professional*, its reporters, editors, and production team. Let me give you an intensely personal view. Researching this article has been the most fast-paced—and frustrating—assignment in my 26 years of journalism. It took three times as long as my investigation of the Kennedy Assassination

that helped reopen the Warren Commission; three times as long as an investigation of Sen. Dave Durenberger that led to his indictment; twice as long as the opening article on the largest malpractice insurance fraud in the history of the U.S., resulting in numerous prosecutions. And it took 12 times longer than a similar story on Computer Associates in *OS/2 Professional* last year. What normally takes one to two calls for any other story, took 12-15 calls to nail down the details of OS/2 Warp Version 3.

Details changed from day to day, and as we came closer to launch date, minute by minute. *OS/2 Professional* supports PSP not for indecision, but for having the gumption to make the tough decision. This time, nothing goes until it's right.

Also in this issue, you'll find the winners of the Second Annual OS/2 Professional Awards. The Awards ceremony was the highlight of IBM's OS/2 Update, held last month in Atlanta at Interop. As IBM's most outspoken critic, *OS/2 Professional* feels it is as important to commend as it is to criticize.

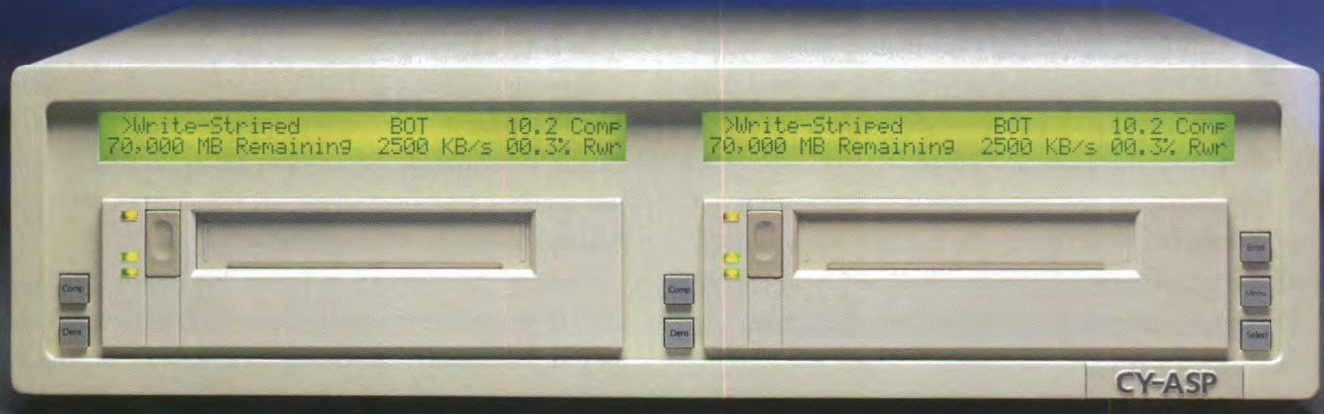
We are about to begin our third year of covering OS/2 and IBM. It's been a whirl. But if Warp really takes off the way we believe it will, it's a whirlwind. We'll be there for you. So buckle up.

**Edwin Black**





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Comments, criticisms, and observations

## On the trail of Bloodhound

Edwin Black's *Dead on Arrival* [Feature, July] stands as one of the finest articles I've read in the computer trade press in many years. It's refreshing to see true investigative journalism that comes to a useful conclusion. My only disappointment came after I stumbled upon the "advertisement" for Bloodhound in my initial scan of the July issue. Not yet realizing that the advertisement was bogus, I was about to fax it to my brother-in-law since it looked like something he could use.

It's a pleasure to receive a computer periodical that contains insightful articles instead of endless reviews which are little more than thinly veiled advertisements of some product or company.

**Richard Hodges**

*via CompuServe*

*Bloodhound is available through OS/2 Express; see page 33.*

## Short end of a stick

We seem to keep getting more of the same: inept marketing that gives OS/2 the short end of a stick that isn't long enough to begin with. I received the August issue of *OS/2 Professional* and the "Summer" issue of *The PC Direct Source Book* on the same day. The magazine had an OS/2 ad about "specially marked boxes," meaning pre-loaded OS/2, and referenced, among others, IBM.

A call to the number in the ad (1-800-3-IBM-OS2) brought me to the "Software Store." The operator there didn't know anything about this and transferred me to PC Direct. My PC Direct phone contact assured me that preloads were available, and that I should "look in the catalog." We did that together, and of course, there was no mention of OS/2 preloads. He informed me that preloads were available on the entire desktop line—except, of course, ThinkPads.

Does anyone in authority at IBM know about this tragically inept situation? IBM is doing its level best to

destroy OS/2 and I despair of ever seeing it get some marketing smarts. Twenty minutes, much of it on hold, to find out that one can't buy IBM's best software product with its best hardware product. A few more people need to "leave" IBM for permitting this to go on and on and on.

**Stanley Kritzik**

*via CompuServe*

## EPM, Jerry, and big files

I wish to take exception to the unqualified statement made by Jerry Pournelle in your August issue [*The Hourglass of Summer*, View from Chaos Manor] that OS/2's enhanced editor (EPM) can't handle a file as large as 10mb. I regularly edit the BY-NAME directory listing from ftp.uu.net (11.5mb) using EPM on a PC with 16mb of main memory, and I have never encountered a problem. In the interest of accuracy, I think Mr. Pournelle's crash warrants further clarification.

**Marvin Foster**

*via the Internet*

*What Jerry actually wrote was, "... Alas, the OS/2 advanced editor can't handle that big a file, and when I tried to import that 10 megabyte file so I could trim off the top nine megs, the system crashed to hardware reset. Annoying." When we tried it, the system didn't crash—it just slowed to a crawl, taking four minutes to load the file, and the swap file shot up to an astonishing 51mb. That inclines us to agree with Jerry's point that the enhanced editor is not the app to use for big files. If it works for you, go for it.—Alan S. Kay*

## Japan: fits and starts

Your piece on *OS/2 storms Japan* [Bytes & Pieces, August] was interesting for two reasons. First, IBM Japan clearly has been doing a much better marketing job for OS/2 than IBM USA. One sees ads regularly in the daily press in Japan. Right in front of my face on the platform in the subway I take home every night is a large, attractive poster ad showing a young woman holding an

OS/2 box reading, "OS/2: Now you can run even DOS and you can run even Windows."

Unfortunately there hasn't been much actual market diffusion yet in Japan. I am buying an OmniPlex 590 system from Dell Japan and having read your *Off the Shelf* report [Special Report, June], I was concerned about SCSI and video drivers. The Dell Japan sales and tech people said they aren't ready to support OS/2 yet. I told them about the letter from a Dell rep in your August issue [Input] stating this these drivers are now included. Dell Japan said they couldn't even obtain them for me from their parent company, so I had to download them myself from Dell USA's CompuServe Forum.

Even with great marketing efforts, IBM Japan may have an uphill struggle with the backwards thinking of Japanese hardware vendors—even subsidiaries of U.S. companies like Dell Japan, and Japanese companies that do bundle drivers in the U.S. like NEC.

**John Kakinuki**

*via CompuServe*

## The games interface

In *Playing Games with OS/2* [Eye on the Market, July], Mr. Kogan states that "OS/2 does need some enhancements to its graphics interfaces to support shoot-'em-up-style action games. Games that must process high-speed graphics rendering algorithms to animate action and scenery need some kind of trap door through the user interface to the graphics driver—without compromising on video display and resolution independence."

This sounds a lot like the WinG extensions for Microsoft Windows that just recently went into beta. It also sounds like the extensions for OS/2 2.1 called DIVE that Ultimotion video uses. OS/2 2.1 has had them since its release! In fact, I've heard that this is how Doom is being ported to OS/2.

OS/2 can really make a splash in the game market. But if I were a game writer and I saw that statement, I would



## INPUT

pretty much have written OS/2 off, especially if I had heard about the WinG extensions for Microsoft Windows.

**Bill Poitras**  
via the Internet

*You are correct. The interfaces you mention are undocumented and do not appear in any generally available product documentation. When I contacted IBM for information on their games direction, they gave only vague answers, and they didn't return my calls when I asked for specific information on these interfaces and Doom. At OS/2 World in July, IBM sources confirmed that a version of Doom for OS/2 is being developed. —Mike Kogan*

### Generating .CMD files

In *Enhancing CID with REXX* [Code Cache, July], you should have at least mentioned that there is a utility which will automatically generate the .CMD

file. I have created a number of REXX command files, to do the hard disk partitioning, install third party device drivers, etc., but I've always used CASPREP to generate the .CMD file for installations of clients, servers, and gateways.

**Rob Simpson**  
via CompuServe

### Good news from Madge

I recently had the chance to read the June issue and was impressed by *The View from Provo* [Connectivity]. I had been running my version of OS/2 on my IBM ThinkPad 750 with its dual boot feature and used the DOS side whenever I needed to access the company network. Your article caused me to call CompuServe and download the new software. The only problem I had was that you said it took approximately 39 minutes at 14,400, but all I had available at the remote site was a 2,400

baud modem. This download took six hours!

After installing the software when I got back to the office, the drivers would not recognize my Madge 16/4 Ring Node card in my docking station. I called IBM and they proceeded to tell me that they did not know what to do, and to please call Madge.

What a pleasant surprise it was talking to Madge. They informed me that the bus timings on a ThinkPad 750 were not compatible with the Madge card running in 16-bit mode. They suggested, as a short-term solution, that I set my card to 8-bit mode. If this worked they would have a permanent solution.

Well it did work and guess what their solution was? They sent me free of charge a new Madge 16/4 AT plus software settable card in exchange for the card I had. This card had the ability

*continued on page 68*



### Your One Stop for OS/2 Backup...

# BakupWiz

Ease of use is another of OS/2 BackupWiz's strong points. A simple, character oriented menu interface and command line operation are provided. OS/2 BackupWiz comes with support for most 1/4", 4mm (DAT), and 8mm tape devices. BackupWiz can also backup to other hard drives, file servers, minis/mainframes via TCP/IP, and removable drives including Bernoulli, Syquest, diskette, and magneto optical. There is even a version of OS/2 BackupWiz that supports many of the automatic tape changer mechanisms. Any SCSI host adapter that has an ADD driver can be used with OS/2 BackupWiz.

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PCX also markets a complete line of standard SCSI tape backup units ranging in capacity from 250mB to over 10GB. Available in both internal and external models, these units are priced from \$550. For very large backup needs, PCX offers robotic tape loader mechanisms from 48GB to over 1 terabyte.

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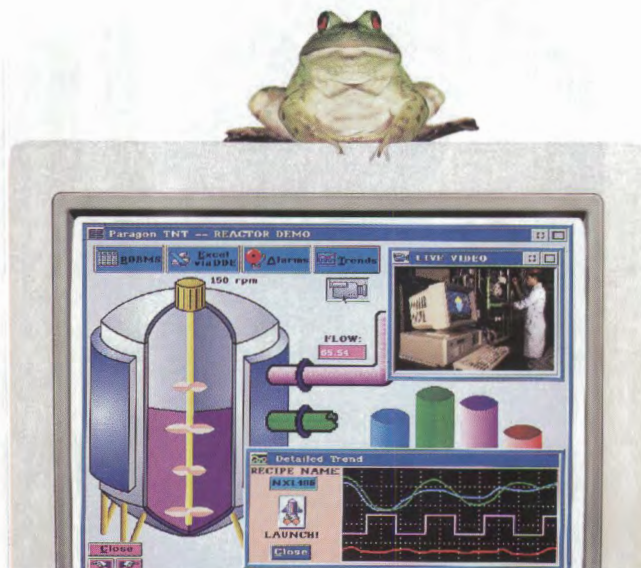
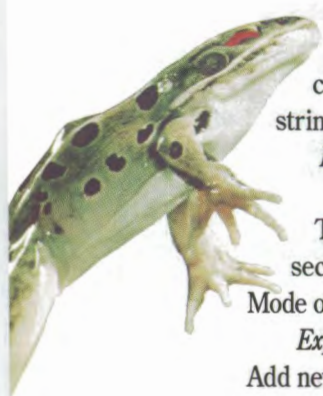
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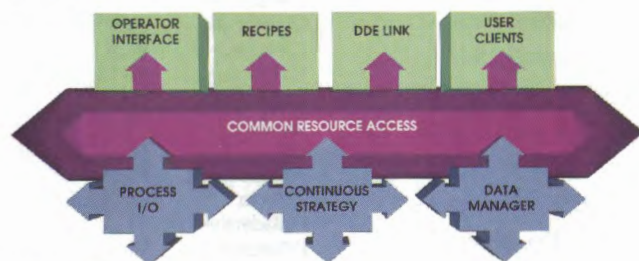


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# BYTES & PIECES

News and trivialities, important and obscure

## We're shocked...shocked!

Tracking the progress of IBM's new PowerPC hardware throughout the summer was a lot like following the health care debate: will it happen this year or not? In what shape, supporting who?

The PCs, sporting PowerPC 601 chips, were originally slated to ship this month. But despite the promise that an array of OSs, including AIX, NT, Taligent and OS/2 for the PowerPC, would be available, only two are visible above the horizon at this point: AIX, IBM's version of Unix, and a port of Microsoft's Windows NT. Hopes that OS/2 for the PPC would be finished in time for a late '94 release have been abandoned. (See *Eye on the Market*, page 47.)

In a company that's trying to reinvent itself around strategic hardware and operating system products, that's a problem.

Thus, in an effort to divert attention away from the fact that OS/2 for the PPC would be delayed, IBM began laying the groundwork to explain why the new computers would now ship more than a year after Apple released its own PowerPC-based computer.

In early September, Richard Guarino, IBM general manager of product development for the Power Personal Systems division, said that a "critical mass of applications" would be needed when the first wave of the PPCs shipped. Guarino went on to say that because October would be a high profile month for IBM, he wanted to ensure that all releases meshed with one another. Either way, he said that an announcement would be made within four to six weeks.

Within days, an IBM spokesman confirmed that the PPC introduction had been delayed and that the company would implement a "phased rollout" in the first half of 1995—timing that many believe will coincide with the release of OS/2 for the PowerPC.



## What starts and ends in A?

Even as IBM's stepchild PC company Ambra was fading into the northwest, to be reborn as a small division of IBM Canada, the folks in Somers were unveiling their latest starts-and-ends-in-A product line, targeted—surprise!—squarely at the home user.

The Aptiva Home PC line, launched in mid-September, is a key element in IBM's bid to regain the PC market share it has lost to the likes of Compaq, Apple, and Dell. And by next year, wonder of wonders, IBM will offer OS/2 as a standard preload option.

The new line will replace IBM's four year old PS/1 line of home and small office PCs as IBM moves to consolidate and update its offerings. Sometime this month, the company will take the next step by folding its PS/2 and ValuePoint series into a new offering known simply as the "IBM PC."

IBM will spend some \$20 million on television ads to launch the Aptiva. This month's ad campaign will feature actor Paul Reiser, of NBC's sitcom *Mad About You*, and will be subject to much scrutiny as the first large scale campaign by WPP Group's Ogilvy & Mather as IBM's new advertising agency.

The Aptiva line is being billed as a new breed of PC with features not yet available on business oriented PCs. It will offer an Intel 486 or Pentium chip, and will be available with four or eight megabytes of memory and hard drives ranging from 270mb to 727mb. New features will include a built-in answering machine with a "wake up" function enabling the computer to turn itself on and off to answer incoming phone calls or to send a fax. All models will ship with CD-ROM drives and stereo speakers.



## IVL launches Service

In an effort to revitalize its relationship with a bevy of software developers, trade publications, and consultants, IBM last month announced it has created the IBM Independent/International Vendor League News Service. The purpose of this venture will be to promote the activities and products of small and third party vendors.

The new service, a part of IBM's Independent/International Vendor League (known to the IBM community as the IV League), will invite its members to submit news and information. The IVL will then distribute the information, ranging from product announcements to news and events, via fax, e-mail, on-line services, and a number of IBM internal forums.

The IVL currently supports a wide array of OS/2 products and services, and is seeking to expand that coverage. Interested parties should call (407) 495-4421 or send e-mail to [ivlinfo@vnet.ibm.com](mailto:ivlinfo@vnet.ibm.com).

## Shrinkage continues at IBM

IBM is continuing to trim its payroll in an effort to streamline a workforce that once numbered close to a half million workers.

By mid June, once Very Big Blue had whittled its ranks to some 235,000 employees, and corporate executives say they are determined to reach their target of 215,000 by year's end.

Last month IBM announced that by year's end roughly 3,000 support staff at company headquarters and in regional offices would be laid off. In addition, the PC Company continues to shrink as it consolidates its PC operations at Research Triangle Park in North Carolina. ♦



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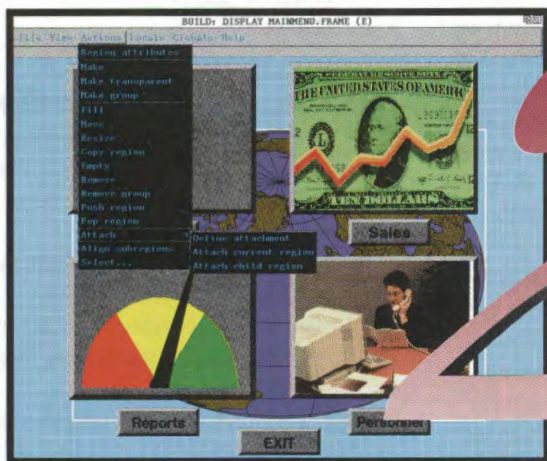
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# Breaking into the Majors

BY BRADLEY D. KLIEWER

In looking for new ways to optimize your business, have you focused too much attention on the major league players without considering the rising stars? Computer analysts are constantly on the lookout for the so-called "killer apps"—the productivity tools that are so radically new in the power they give users that they make the computers and operating systems they're written for "must buys." Lotus 1-2-3 drove PC and DOS sales. Desktop publishing software, particularly Aldus Pagemaker, made the Macintosh.

This tool-driven dynamic built a handful of basement enterprises into heavy hitters in the applications market: Ashton-Tate in the realm of databases; WordStar, followed by WordPerfect, in word processors; Borland for languages; Novell for network operating systems. Yet these vendors, once so hot, no longer define the technological leading edge in their respective areas. Some have gone on to market other winning apps (Lotus Notes, Borland's Paradox) while others, such as WordStar, have fallen into obscurity.

One vendor, Microsoft, had the vision to bring a graphical interface, Windows, to the PC desktop. Its early lead gave it an edge in multiple application categories on the new platform: Word for Windows (word processor), Excel (spreadsheet), Access (database), and Visual Basic and C++ (languages).

The hallmark of a mature marketplace is a small number of large companies with well-recognized names and large chunks of market share. That describes today's PC software market. When consumers look for new applications, the numbers suggest they turn to the major players (or stick with those who have enough muscle to have their software preloaded on the new hardware being purchased).

The day of the killer app seems to have passed. Most of the leading products on the top shelves at the superstores rose to prominence slowly, over the course of several years. Most of the

companies selling them leveraged their success by following up their initial flash of insight with incremental technological advances that improved productivity.

Take Microsoft Word as an example. The early versions of Word were slow and the user interface departed from established convention. Yet Word offered unique features such as style sheets (a concept that took years to establish, yet today defines the *de facto* standard for document formatting) and a WYSIWYG

(What You See Is What You Get) display. Word's architecture positioned the product for the coming generation of laser printers, and eventually the much better WYSIWYG features offered through Windows. At the time, Microsoft was a minor league player in a lineup dominated by WordStar and WordPerfect.

Other minor league players had even fewer resources, yet managed similar feats. Samna produced Ami Pro; Ansa produced Paradox. Both rose to national prominence *before* they were purchased by Lotus and Borland, respectively (and therefore made their owners lots of money). Both made their imprint by

offering products with new and unique features that competed against overwhelming odds in a crowded market.

Of equal importance, neither established a market by radically changing the workplace. Rather, their new features allowed incremental improvements in end user productivity—Samna by offering the first Windows-based word processor, and Ansa by easing database maintenance with an advanced interactive interface.

Many users lament that the best marketing, not the best features set, wins computer market share. The truth lies somewhere in between. In *Star Trek: The Wrath of Khan*, it was Khan's lack of 3-D strategy that led to his downfall). The best marketing in the world could not establish Windows as a market force until the system stabilized in versions 3.0 and later—the technology and marketing must both work reasonably well to establish a new standard.





## THE WIZARD OF OS/2

Another factor, perseverance, adds a third dimension to the equation. Several of today's successful software products suffered through many lean years because they believed in their products and had the support of dedicated fans.

There were people using Ami Pro or Word or Paradox before they became de facto standards. They used them because these software tools worked better than others, and these folks cared more about productivity (and perhaps supporting technological innovation) than they did about popularity. They tried the better mousetrap, and when they looked behind them there were lots and lots of people on the path following them.

OS/2 offers users a clear productivity edge. IBM has persevered through seven revisions of the operating system, and it now offers unmatched multithreading capability, long file names, drag and drop integration, preemptive multitasking, a user interface that is so state of the art that Microsoft is copying it, full 32-bit optimization, and a flat memory model.


Since it's hard to criticize the OS/2 technology, the knock on OS/2 these days is that there are no great core apps available from

the major software companies.

Do you want famous, or do you want good? Is it more important that the software comes from Redmond, Washington or Orem, Utah, or that it be on the technological cutting edge and improve productivity?

Today, we see promising signs from several companies small and large (the Ansas and Microsofts of yesteryear). One small company, DeScribe Inc., has begun to rise from obscurity with a word processor that first appeared in the dark days of OS/2 1.x. Lotus, already a major leaguer, has been grooming its farm-team OS/2 SmartSuite for native 32 bit operation. And moving over from the NextStep neighborhood of Unix, Athena, with its Mesa spreadsheet, shows promise as a new contender for major league status.

Dedicated users and beta testers have been extoling the virtues of these products. They know that there are solid OS/2 apps—it's simply that the world won't recognize their names until next year. By adopting young products with advanced features early, these companies are prepared to reap the benefits of a new dimension in computing. Are you? ♦



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# OS/2: THE NEXT GENERATION

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faster, more broadly  
appealing OS/2.



# Warp Speed

BY BRADLEY D. KLIEWER

**I**t is perhaps the largest development project yet undertaken on the Intel hardware platform. Call it v3, call it Warp, but whatever the name you use for the latest version of IBM's flagship operating system, call it improved. Mature.

Or maybe just a winner.

Yet despite all the hoopla and the TV ads, the best new feature in Warp is that so little *appears* to have changed. IBM has evolved OS/2 and its Workplace Shell interface to a new level of user support—yet you'll be able to migrate to it easily, without creating a nightmare scenario of retraining and retooling.

As you prepare for '95, then, you'll have to decide whether there's a compelling enterprise justification for rebuilding your operating environments from the ground up by shifting to a new, version 1.0 operating system. Or would you rather work with a stable, proven OS?

OS/2 Warp, with its superior support for

existing DOS and Windows applications and the array of maturing native OS/2 applications, promises to improve productivity for both OS/2 veterans and those DOS and Windows users who have reached the limits of their old technology.

IBM's goals—to build an enticing body on an industrial-grade skeleton, to improve productivity by adding new features without negating ingrained habits and preferences, and to provide real, working software solutions in native 32 bit form—seem largely fulfilled in Warp.

The veteran OS/2 user will find a number of new options and new features. By and large, these are not changes but extensions, not radical new concepts but rather tweaks to improve productivity. For example, you can now lock an object into drag mode by holding the Alt key when you start the drag operation. (A little padlock icon appears under the icon to remind you that you are in "pickup" mode.) With the lock



## OS/2: THE NEXT GENERATION

in place, you can open and close folders and move windows before dropping the object on your intended target, thus eliminating the need to rearrange your desktop to uncover the drop target.

Subtle effects, such as windows that remain in the background while you pick up or drag their objects, show that IBM has carefully studied and optimized OS/2's object oriented interface. Other drag-and-drop operations work as before and the new pickup mode meshes nicely with the original techniques. Computational performance aside, Warp helps you work more efficiently.

### No Stall Install

Even before you get Warp up and running you will see improvements. The new "one-button" install process bypasses the much-criticized welter of queries that greet an unsuspecting 2.x novice (partitioning the disk, formatting the drive, and so forth). If you prefer the old questions, you can choose **Advanced Installation** (which feels much like the old version). Otherwise, choose **Easy Installation** to have the system determine the appropriate configuration options.

When you get to the second stage of installation, Warp examines your components to determine the appropriate hardware settings, detecting not only the type of graphics adapter present but, where possible, the type of display attached. For example, the ATI Graphics Ultra we use stores settings for the attached monitor. The Warp install program reads the ATI settings and selects the appropriate display resolution automatically. The Warp Beta 2 (the latest version of Warp available at press time) properly identified all of our hardware—CD-ROM drive, SCSI adapter, and sound adapter. None of these were directly supported in 2.x.

The Warp Beta 2 did not install flawlessly, however. It exhibited several of the annoying bugs one comes to expect in a beta product. For example, the display detection routine correctly identified the adapter and monitor, but set the vertical and horizontal refresh rates incorrectly (making the initial graphics install

dialog unreadable). We had to fool the install program by setting the graphics card to a lower resolution (800x600) display before we could continue. After the beta was up and running, we were able to set the Graphics Ultra back to high resolution and use 1280x1024 and 1024x768 modes without further problems.

Likewise, when we installed the beta over an existing copy of OS/2 for Windows, it reported an error just before completing the process, but it installed without problems over DOS 5.0 and Windows 3.10 and 3.11.

Fortunately, we had backed-up the system using BackupWiz before installing the Beta, giving us an easy way to reformat the drives and restore the old system before trying other variations (I lost count after about six restores). We eventually discovered that a few minor changes to CONFIG.SYS would resolve the problem. We expect these bugs were eradicated once Warp went gold.

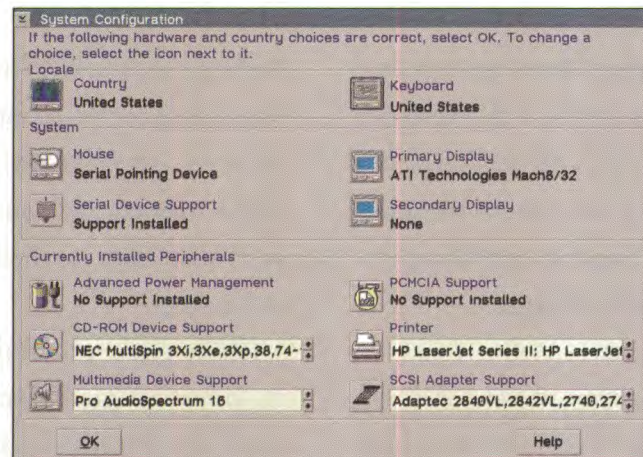
Nevertheless, we would recommend that once you have the final version in hand, you back up your system before installing Warp—just in case. There are so many hardware variations on the Intel platform that it is unrealistic to expect any new operating system to work flawlessly on every one of them.

In a striking departure from the way things have been, Warp supports far more

hardware out of the box than does Windows 3.11. Windows supports 11 basic adapter types, OS/2 supports 19—many of them more contemporary than Windows. This broad coverage extends to SCSI adapters, CD-ROM drives, and sound cards (and to a lesser extent printers, already well supported under 2.1). The best news is the CD-ROM support, which now includes several non-SCSI technologies including IDE, most sound adapter/CD-ROM combinations, and several proprietary adapters. These are only the highlights of significant improvements to Warp's installation and device support.

### Look and Feel

IBM has finally learned that looks are important. Many of Warp's changes are cosmetic, but critical to mass market success.



Warp's new installation routine does a good job of determining a system's configuration details.



## OS/2: THE NEXT GENERATION

Key icons have a new three-dimensional look and a few use animation effects to communicate their status. For example, a file folder icon will visibly open when you open the folder (in addition to the gray-barred background that signifies an open object). The command prompt icons have shed their dull looks to reveal brighter colors and more meaningful symbols. And when you install Warp over DOS or Windows, the default desktop background is a more pleasing teal color rather than the workmanlike steel gray we've gotten used to. (If you install the new version over OS/2, it will preserve your old system colors and layouts.)

In look and feel terms, though, the most significant changes are the user interface enhancements. The launch pad and its associated drawers (little buttons that each reveal a compact window of your favorite applications and/or system objects) provide a convenient alternative to multiple application folders. You can set the system to close parent folders as you open child folders; a new menu option makes it easy to return to the parent.

The system is rife with other new options as well, among them automatic backups of your configuration (including the desktop and earlier versions of CONFIG.SYS), a long overdue **Undo arrange** feature, and a comet cursor that makes it easier to follow the mouse on LCD screens (it looks like something inspired by sparklers on the Fourth of July). Power users who like to tweak the last ounce of performance from their applications will appreciate the new priority setting available to DOS and Windows sessions.

Another change feels more obtrusive at first, but will simplify support in the long run. IBM has moved access to an object's settings notebook from the drop-down menu next to the **Open** option at the top of the right-click menu to an actual **Settings** option in the menu. If you work with novice users, you can stop describing "that little arrow next to **Open** on the menu" and simply say, "click on **Settings**."

You'll also find improvements on those occasions when an application locks up the message processing queue. When a PM

application appears hung and you press Ctrl-Esc, Warp usually returns control to the task list with little or no delay. Despite dozens of message queue locks, only twice during our testing did the beta report that an application had stopped responding to requests (the rather obscure message familiar to 2.1 users who lock their queues, and often the precursor to the dreaded three-finger salute). Now, when applications go awry you can more easily regain control instead of getting stuck on a runaway train.

### Size and Speed

The problem with revolutionary computing technologies is that they tend to be resource intensive. Those resources include time and memory, meaning that the products are slower and consume more memory than their older cousins.

Two and one-half years ago, OS/2 2.0 made radical improvements over the user interface and backward compatibility of OS/2 1.3 (a shift similar to the upcoming transition from Microsoft's Windows 3.1 to Windows 95). Thus, IBM has had more than two years to solidify its foundation and evolve OS/2 into a lean, responsive environment with an unparalleled breadth of software choices: DOS, Windows, and a mature 32-bit multithreading API for native OS/2 applications.



*With OS/2 Warp, a user can easily add an object such as a printer to a drawer on the new Launchpad.*

OS/2 Warp will now run reasonably well on a 4mb system, with a realistic "sweet spot" of 8mb or more—a decrease from 2.1's 8/16mb target and similar to today's Windows requirements (which should be more efficient than we'll see in '95). You may prefer to upgrade a desktop machine to 8mb or more, but if your laptop is stuck at 4mb, at least now it will be usable. That efficiency translates to better performance on all platforms—whether you run OS/2 on 8mb or 64, you will see the benefits of optimization. Combined with the new 32 bit code integrated into the PM, the enhancements give desktop operations turbocharged performance, and make your 486 workhorse feel more like a Pentium. If you already have a Pentium, you'll be running at warp speed.



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OS/2 Warp's Windows environment has broadened to include those few applications that require Win32s support, which means you now can run some of those rare, technically oriented apps such as Mathematica that OS/2 2.1 couldn't handle. More importantly, running multimedia apps such as the Windows Media Recorder or a sound enabled Windows screen saver no longer exhausts system resources. Other applications continue to run smoothly while Windows applications play their little ditties (.WAV files work best; the beta frequently played MIDI files unevenly while other tasks were running). As was the case in 2.1, the Warp beta still had problems passing control of the sound adapter back and forth between Windows and OS/2—OS/2 would quit processing sounds after running a Windows full-screen session, and attempting to close and restart a Windows session would generate a report that the sound adapter was locked by another application.

Fortunately, the sound adapter problems are less severe when using the seamless Windows option. IBM has made this option more appealing by adding the Windows Control Panel to the Command Prompts folder. In fact, with Warp you may never again need a full-screen Windows session.

IBM has also improved Windows reconfiguration. In the new version, when you change a driver and request a restart, a dialog box tells you how to restart the Windows session; in 2.1, Windows simply exited back to OS/2.

As with other display based operations in Warp, Windows display updates have been turbocharged. This was especially noticeable on Berkeley Systems's *Star Trek: The Screen Saver*: ships moved faster and Tribbles reproduced at a rate worthy of their reputation.

Prior to Warp, OS/2 was a reasonable, if uninspiring, Windows workstation. It improved productivity in an environment of mixed DOS and Windows applications and provided better multitasking, but Windows diehards had little incentive to switch.

Things have changed: in '95, Warp may very well be the best

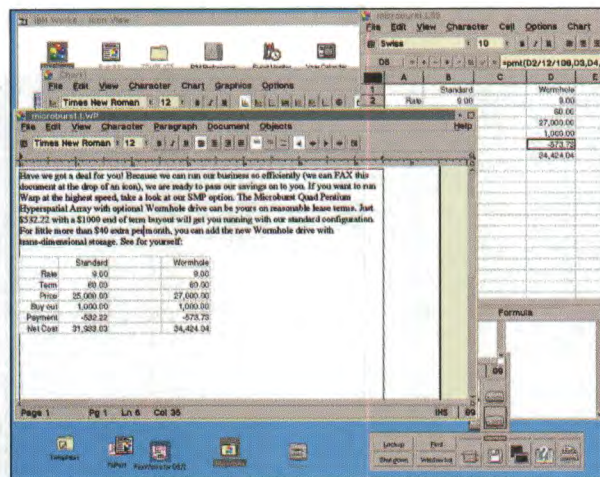
(if not the only) operating system sold for Windows users who need solid compatibility with Windows 3.1 apps. Its superior DOS multitasking and maturing native OS/2 apps are a bonus.

### The BonusPak

With Warp, IBM demonstrates the advantages of native applications right out of the box. The new BonusPak, a separate product inside the package, is an inspired marketing move that solidifies the relationship between the operating system (the foundation for all operations) and those extensions that add utility without modifying, and potentially weakening, the base (LAN services, communications, and applications). One operating system, no variations at the core, and a consistent API with plenty

of backward compatibility helps assure reliable device support from vendors who needn't follow a moving target. It also makes the installation process less intimidating by dramatically reducing the number of diskettes needed for the basic installation.

IBM has finally dumped its industrial style applets in favor of real applications. IBM Works (previously two third-party products: Footprint Works, reviewed in the Febru-



The new IBM Works included in the BonusPak offers an array of solid productivity applications.

ary 1994 issue of *OS/2 Professional*, and Arcadia's Workplace Companion) forms the foundation of the BonusPak, which provides a basic word processor, spreadsheet, flat file database, chart application, and PIM. Although not yet included in the beta version we looked at, the cross-application phone list will be integrated into other BonusPak apps such as the FaxWorks product.

Footprint Works was a bargain at \$99—now you get it free right in the OS/2 box. As a result, small offices and home users can look at OS/2 as a one-stop software shop. The applications within the BonusPak are robust enough for most users, and include such advanced features as mail merge, DDE links between data in the disparate applications, spell checking, and data import and export.

Nevertheless, the features within each application are not as robust as their dedicated cousins. Users with advanced require-



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ments should still look toward packages such as independent DeScribe, Ami Pro, Lotus 1-2-3, Mesa, and other native OS/2, DOS, or Windows applications. At the very least, though, IBM Works will give you a feel for the advantages of a native OS/2 application, and thus may help spur the demand for, and growth of, 32 bit applications.

In addition to IBM Works and FaxWorks, the BonusPak provides native communications software for CompuServe (CIM, the CompuServe Information Manager), an easy-to-use "on-ramp" to the Information Superhighway, and a reduced functionality version of IBM's Person 2 Person teleconferencing utility, which offers features such as whiteboards and interactive links to data on the desktop from both ends of the phone line.

The CIM and Internet connectivity applet look particularly promising as extensions to the operating system. Both greatly simplify the task of navigating and using on-line services and information. Of course, both also incur extra charges in the form of CompuServe connect rates or Internet access through your preferred provider. By default, Internet service connects through Advantis, an IBM company, but you may override the default to select the provider of your choice. To provide seamless Internet access, IBM will bundle TCP/IP, SLIP, Gopher and other Internet facilities in the base OS/2 package (a Mosaic interface will appear later next year).

Overall, the new applications are easier to use and better looking than the OS/2 1.11 applets. For the more technically inclined users, IBM continues to provide a few advanced utilities such as the EPM editor and a new feature called the System Information Tool. This tool provides detailed information about your system configuration—the amount of installed memory (and its mapping), information about adapters in EISA and Micro Channel slots, peripherals attached to the SCSI adapter, and IRQ mappings. You will also find a very useful CONFIG.SYS file viewer that lists the revision number and file data for each installed driver. Technical support personnel and technology addicts alike will immediately fall in love with the System Information Tool.

### The Big Pak Attack

IBM will market several flavors of Warp, differing in which of the two basic OS/2 packages is included, as well as BonusPaks with additional features. The BonusPak just outlined might best be described as the entry level package.

As in the past, Warp has two basic versions: with and without WIN-OS2 built into the system. The latter, which according to the plans current at press time will ship in a box with a red spine, was previously known as OS/2 for Windows (code named Ferengi) and requires an installed copy of Microsoft Windows 3.1 or Windows for Workgroups 3.11 to run Windows applications (users content to run only DOS and native OS/2 applications can install to a system without Windows).

The version planned at press time for a blue-spined box (previously known as OS/2 2.1, code named Borg) includes IBM's recompiled version of Windows and will ship late this year—according to one IBM report, it will ship six weeks after the red-spined version.

In late September, IBM said it will further differentiate the packages with different BonusPak configurations—much as you might buy a base model car and then add different trim lines depending on your needs. Instead of an LX, LE, GL, or the like, your Warp trim lines will include LAN Client and LAN Server. Those looking for a high performance engine can turn to SMP—the symmetrical multiprocessing version.

LAN Client provides the requester software necessary to connect to IBM's LAN Server and Novell Netware (as previously mentioned, TCP/IP already appears in the base BonusPak). In addition to the standard offerings, the LAN Client BonusPak will include LAN Distance remote (for connecting to the network via modem), System Performance Monitor/2, LAN Transports, and CID response files (see July's Special Report for more information about CID).

LAN Server, the second BonusPak trim line, was at press time scheduled to ship in a box with a green spine. The LAN Server version will not ship until the end of the year, although LAN Server 4.0 has already shipped as a standalone product. As noted earlier, all versions rely on the same kernel that ships in the entry-level package.

LAN Server itself has shown great improvements in version 4.0. Version 3.0 quietly took its place as the second-best-selling network platform during the past year. With a simplified interface (now completely integrated as a Workplace Shell application) and important new features (such as optional disk capacity restrictions), IBM is prepared to compete head-to-head with Novell, which still owns slightly more than 70 percent of the market. ♦



# The Warp Campaign:



IBM's marketers have six months to convince millions of Windows users to switch to Warp. Here's how they plan to do it.



# Phasers on Stun

BY EDWIN BLACK

**T**hey are smarter this time. *Star Trek* proves that. This fall, when millions of viewers tune into the syndication of *Star Trek: The Next Generation*, they will be greeted by a dramatic advertising campaign for the new OS/2 release, now officially named Warp—formalizing its code name into a genuine commercial identity. The suffix v3 serves as the version number.

It is an understandably fluid situation, as IBM's Personal Software Products division shapes and reshapes its plan. But at press time, two weeks before launch, one of the creative plans most favored in Austin looked like this:

After the *Enterprise* fades to black, the screen will show an iconic hourglass reminiscent of the one used by Microsoft Windows. "Millions of people wait millions of hours every day for their computers," the voiceover will say. "They wait... and wait ... and wait. But soon the wait will be over." OS/2 appears. "It's about time," the com-

mercials would emphasize. The hourglass theme is only one of several that was debated.

Whichever campaign is ultimately chosen, it will play and replay throughout the fall reruns of *Star Trek*, on the Discovery and Sci-Fi channels, and elsewhere on the airwaves as PSP, its wallet, and its advertising agency, Ogilvy & Mather, try to make Windows users see OS/2 in that frustrating Windows experience.

*Star Trek* fans fit squarely into IBM's computer user demographic targeting. And the friendly galaxies of the Federation are where IBM PSP at press time is planning to invest most of its approximately \$25 million in Warp broadcast dollars—part of a total launch budget of nearly \$50 million.

The choice of *Star Trek* is more than just good media buying. It's an uncannily apt symbol of the Armagaddonesque conflict that is about to unfold between Microsoft and IBM. Like some final clash between the Federation and the Romulans, this deciding battle in the OS



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Wars will be long, drawn out, and spectacular.

First blood will be drawn by IBM on Oct. 11 with PSP's global launch of Warp. But throughout the fall and first half of 1995, the battle will rage as Windows 95 forces try to outgun, outmaneuver, outsmart, outspend, and outhouse IBM. At stake are the hearts and minds, desktops and datastreams of Earth.

IBM has the guts to win. It finally has the crisp, clean product it needs to gain mass acceptance. But does IBM have the brains and talent to make it happen? Keep your fingers crossed.

### The Climax Approaches

The computer press and consultant buzz have been predicting for months that OS/2 would be overwhelmed by the massive adoption of 25 to 50 million copies of Chicago soon after Microsoft ships its 4mb, or more likely 8mb, preemptive 32 bit multitasking, operating system sometime next year. Even PSP officials can acknowledge the finality of the Warp battle. A harried and anxious Wally Casey, PSP's director of marketing, admitted as much last month to a small group at PSP's modest Austin headquarters. After briefly reviewing the history of IBM's struggle to capture market share, Casey muttered, "If we can't do it this time, we've really..." searching for the words, "... blown it."

If OS/2 does not catapult to the ten million user level by next summer, it probably will survive only as a boutique OS serving a stalwart niche community of users who have too much invested to make the switch. For the rest of us, the Romulans will be calling the shots.

A senior IBM marketing official was unmistakable: "This is it," he said as he ran his fingers through his hair. "We have six, maybe seven months to make OS/2 work before Chicago hits. This is our last chance. Not our *next to last* chance. Our *last*. But I tell you—this time it's different. This time we're going to win!"

### It's About Time for a Difference

Something is indeed different this time. To the casual observer, though, some things seem the same. Most noticeably, the arrogance of more than a few IBM marketing officials is still there. Last year's general manager of PSP's worldwide marketing, Bill Rich, complained that the arrogance was the result "of talking to ourselves too much." IBM's CEO Louis V. Gerstner Jr. insists that the arrogance must be eradicated if Big Blue is to survive—and if Big Bluers are to keep their jobs.

But for more than a few execs at PSP in Austin, arrogance is

all they have left to bridge the seeming contradictions in their existence—the remnant trappings of corporate power even as the everpresent consequences of repeated corporate failure haunt their every move.

While PSP's armor of arrogance is still there, it has now been pierced by a spear of reality. Underneath that facade, people in Austin are scared. That's good. They will do better because of it.

Not long ago, an Armonk executive asked an outside observer what he thought was wrong with IBM marketing. The observer replied: "No one is responsible. No one is there to take the credit or the blame. No one gets a medal or gets shot if the program succeeds or fails." Indeed, many of the people who presided over OS/2's previous failures have been promoted. Moreover, many of the old faces are still in command, such as Wally Casey and PSP Advertising Manager Joanne Meleski. But this time it's different, because someone will get shot if the campaign doesn't succeed. Who?

"I'll be shot," says Dan Lautenbach, PSP's general manager of worldwide marketing. Lautenbach is a team player who eschews too much spotlight. He doesn't want to hog the credit. But the fact remains that Lautenbach is a critical part of the difference this year.

There is probably no man in the company better suited for the challenge of Warp. His resume includes more than two decades with IBM—and his meat and potatoes has been the sharp edge of sales. He's tough, speaks his mind, and takes decisive two-fisted action when necessary. Moreover, Lautenbach comes from the truest bluest family in the IBM tree. One brother, Ned, is chairman of IBM's World Trade Co., and reports directly to Gerstner. A second brother, Terry, retired as senior vice president and general manager of what was then known as IBM United States. He was rumored to be among the contenders for the job that Gerstner ultimately won.

PSP President Lee Reiswig hand picked Lautenbach to command the OS/2 forces in the coming clash. Dan Lautenbach has juice. He has connections. He has the *cojones*.

As important as new leadership up close are the new controls emanating from on high. Warp is being run as a full IBM operation with worldwide IBM backing and more close corporate control than ever before. In fact, Gerstner personally renamed the product Warp at the last minute after all of Austin and O&M had signed onto the computerese name "v3."

The Oct. 11 unveiling will be a global IBM event. In Man-



## Q & A

*A straight-talk interview on topics of professional concern*

hattan, Reiswig and Robert LaBant, senior vice president corporate for North American marketing, will host the launch. In London, it will be Lautenbach and corporate executive committee leader Ellen Hancock, an IBM vice president. In Sydney the next day, it will be John Soyring.

The whole company will be there for OS/2—IBM's money, its talent, and the sheer force of its 600-pound gorilla organization. Gerstner has surrounded himself with tough-minded executives such as Hancock, former Software Solutions marketing guru Mark Elliot, Marketing Vice President Abby Kohnstamm, and financial overseer Jerry York. They're all involved in some way in the OS/2 Warp campaign.

Much of the nearly \$50 million will be spent in just a few concentrated weeks surrounding the actual ship date—at press time said to be in the last days of October. For the record, \$50 million is about twice the amount PSP spent to promote OS/2 for Windows, aka Ferengi.

### Windows of Opportunity

The experience IBM gained in selling Ferengi will be invaluable in the Warp campaign. That's because the campaign's real target is Windows users. In truth, Warp is actually the upgrade to Ferengi, rather than the Borg, OS/2 2.1. Check for yourself: Warp beta CD-ROMs are emblazoned with the words "Arrive at Chicago earlier." The CD-ROM's written materials identify the beta as a "version of OS/2 for Windows." A Lotus SmartSuite Value Pack to be distributed by Lotus in the coming weeks will convert 1-2-3 for Windows files into OS/2 files to accelerate the defection.

So understand the turning point we have reached. Conventional OS/2 and OS/2 for Windows are no longer separate products. They are one and the same, commanding one and the same resources and one and the same center stage. Not surprisingly, the keynote speaker at the recent Windows Solutions convention was none other than Reiswig.

### The Role of the Existing OS/2 Base

If Lautenbach and company are successful, the IBM product adopted by a bold vanguard of multitasking pioneers will become the masses' operating system of choice: a truly better Windows than Windows. Conquest of the estimated 120 million user strong DOS community will be priority number two. And the



## Warp's Point Man

The development and rollout of Warp involves the work of many people. But ultimately, the success or failure of the new version rests on the shoulders of one man, Dan Lautenbach, the general manager of worldwide marketing for IBM's Personal Software Products division.

To get the inside scoop on how Lautenbach plans to succeed, *OS/2 Professional* editors Edwin Black and Bradley D. Klierer interviewed him on September 2. An edited transcript follows.

**OS/2 Professional:** You say the October launch of Warp will be more successful than any other OS/2 launch. Yet all the same people in charge of the previous launches of OS/2 are in charge of this launch.

**Dan Lautenbach:** No, that's not true. Now I'm in charge. Plus we have an energized marketing and development team facing a competitor who's a year late because it can't keep up functionality-wise. More than that, we have an across the board commitment from all of IBM to make this product fly.

**You're in charge. True, that's different. But many of the middle management are the same.**

If it fails it's my fault and if it succeeds a lot of that success will have been influenced by the tone I set, as well as my team's commitment to win.

**Nonetheless, you have a nearly \$50 million product campaign**

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## OS/2: THE NEXT GENERATION

existing OS/2 community? Sadly, but inevitably, our specialness will disappear in the process. And yes, that process has already begun. OS/2 is now a Windows product.

Lautenbach confirmed in an interview last month with *OS/2 Professional* that the dominant target audience for the Warp campaign is the Windows installed base. If Chicago is to be beaten, the victories clearly must be on Microsoft turf.

But any strategy toward achieving those goals is incomplete if it doesn't include the OS/2 installed base. In fact, excluding OS/2's corporate community from the initial launch shows how little PSP management knows about the several million adopters they already have managed to win.

One senior Austin exec explained Austin's wrong thinking this way: "OS/2 users have no choice. What are they going to do? Switch to Windows?" Yes, they could. Ask any corporate IS manager or department head using OS/2 alongside his other operating systems.

In fact, the very first place PSP should turn to with the Warp launch is the corporate OS/2 installed base. It represents for IBM the most accessible Windows users in the world.

But PSP isn't including OS/2's own vanguard in the first wave. It doesn't know who they are or even how many are out there. PSP doesn't even have many of their correct addresses.

When an OS/2 public relations staffer was asked what she had done to connect with the installed base, she replied, "That's not my job." Indeed, after nearly three months on the job, she confirmed that she hadn't ever read any of the three OS/2 publications.

Savvy OS/2 observers, however, know that cultic OS/2 users and the ever-devoted Team OS/2 crowd that "would rather fight than switch" do not represent the majority of the installed base—only the most vocal segment of it. OS/2 is fundamentally a corporate and government agency tool designed for mid- to high end systems and to support mission critical applications. The companies and governmental units that use OS/2, and the conservative and careful IS officers and department heads who control its proliferation, generally support far more desktops under DOS and Windows than OS/2, and in some cases even more Unix than OS/2. Surveys of *OS/2 Professional's* readership have consistently shown that 85 percent use Windows.

These IS managers and department heads thus are supporting limited numbers of OS/2 stations—but they are likely open to supporting even more of them. They want ease of installation,

ease of administration, and ease of use for themselves and the various levels of users they must serve. And they want a 4mb version—if for no other reason than for home and mobile commuting. Warp is their product.

And Warp comes with free goodies that will win the corporate computing person's heart. The internal application suite known as IBM Works—pieced together diligently by Sharon Manual of Footprint—is a magnificent selling point for any corporation eager to expand entry-level productivity as well as mission criticality with a single package. With Warp, the IS manager can revolutionize the productivity of everyone in the St. Louis office, or the claims department on the eighth floor—all the while preserving the company's investment in virtually every Windows and DOS app it ever loaded.

But we aren't saying that the launch won't be successful because Austin has sidestepped the OS/2 realm. We think it will be. The campaign for Warp is no Bloodhound. Warp's four-columned attack will be a success immortalized in the marketing history books. PSP has the product. It has the moxie, the bucks, the talent. It can and will blast away the Romulan Gates. Here's why.

### The First Column: Advertising

IBM is betting the operating system on its new partner Ogilvy & Mather. O&M is one of the world's most creative advertising agencies. It knows how to drill an identity into the consumers' minds. O&M is why people don't leave home without their American Express cards. Handpicked by Armonk to service the entire half billion dollar IBM account, O&M has a lot riding on Warp, its first assignment.

O&M and PSP have separately and together conducted tons of focus groups and assembled other research to decipher what computer users dislike about OS/2 and Windows. They have concluded, among other things, that corporate adoption is no longer decided exclusively by the IS director, but now through the department head and department computer guru as well. These are people who will retrace with OS/2 the original adoption route that proliferated the PC—home use first, and then migration to the office.

O&M is therefore targeting the typical somewhat knowledgeable computer user. The thinking is that a groundswell of demand for OS/2 by these users will not only accelerate corporate acceptance, but add the hitherto untapped small office/home office as a market sector.



## Q & A

It hasn't been easy for the O&M folks. They are working at breakneck speed. The agency was recruited around Memorial Day, but it wasn't until after Labor Day that many O&Mers received their assignments and PSP advertising officials finally learned who their O&M contacts were.

The agency also knows precious little about OS/2. In late September, long after most of the \$25 million was committed, one senior media planner was asked if she had ever seen any of the OS/2 magazines. "No," she answered. "I just got this assignment three weeks ago."

But it will not matter. Remember, OS/2 users are not the target. Windows users are. And O&M knows something about Windows. It was one of Microsoft's agencies before IBM raided it. Indeed, that's why PSP has elected to coordinate the Warp campaign out of O&M's Los Angeles office instead of the agency's New York office. The Los Angeles group handled Microsoft. "We have Microsoft's team," Lautenbach boasts.

"You have to understand," an O&M creative source explains, "we're working day and night to figure out what OS/2 is and why the average Windows user should switch. Some of us now know why the average Windows user should switch, but few of us actually have OS/2 figured out yet."

The clearest indication of the radically different fashion in which OS/2 will be advertised is in the media schedule recently sent to Austin. Any heads-up media schedule is always in minute to minute flux. But as of two weeks before launch, the following aggressive strategy is in place.

- The placement of the first wave of ads beginning on Oct. 11, or shortly thereafter, excludes nearly all traditional computer publications. On weekdays, the mainstays are *Star Trek: TNG*, the Discovery Channel, the Sci-Fi Channel, CNN, and CNBC. Monday Night Football was being considered, but had not been finalized, at press time. On the weekends, O&M has purchased news and sports.

- Once the print campaign does get going, it will run in business dailies, weeklies, and biweeklies—look for ads in USA Today, the Wall Street Journal, and Business Week. They will also run in a relatively new home user targeted Ziff-Davis publication called *Computer Life* (which one PSP advertising exec likens to a *Money* magazine for computer users).

- Some token print ads will appear in weekly and bi-weekly publications around Comdex, but the main computer press expo-

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**being launched by an advertising agency—Ogilvy & Mather—that has no experience with OS/2.**

Oh no, wait. They're not doing the launch, IBM is. But in terms of O&M's PC software experience, let's not forget they used to be Microsoft's agency. Also remember, O&M is just doing the advertising. And it's not \$50 million worth of advertising alone. Those marketing dollars will also include mass mailings, major merchandising campaigns, and more.

**Volume advertising, in and of itself, buys a certain degree of success. But do you think you're going to get every dollar of smart media value inasmuch as O&M is buying all of this media overnight?**

We're really having to scramble with our ads because of the timing of IBM's selection of O&M. The question is should I launch this product next spring or now? No one believes I should hold the launch. My view is that the time to launch is now because Chicago continually slips and I want to be out there in the marketplace with a good product months before they ship.

**OS/2 has always been a corporate product. What market segment are you trying to reach with Warp? Is your main message going out to a person who knows what an operating system is, or to someone who really doesn't know or care what an operating system is?**

This year we're targeting knowledgeable end users. IBM will target novice users next year.

**You've added Win32s compatibility to Warp. What about adding Win32 compatibility once Chicago comes out? Will you be aiming for Chicago apps to run on OS/2 as well?**

I'm not hedging, but when the time is right IBM will do it. Technically, IBM can. But if we do it too soon, people won't have a driving reason to go with OS/2. The flip side is we don't want to help Windows apps be successful. IBM took a lot of heat when NT was coming out. Everyone was on us: you better do NT. Yet NT hasn't been overly successful.

**You want the new version of OS/2 out there months before Chicago ships. Are you also trying to target a point upgrade about the time that Chicago actually hits?**

I intend to make different offerings with OS/2 in 1995. Not release points, but different offerings, such as stacks and different bundlings.

**Like you did a few months ago offering Ferengi with C Set?**

Right. Next year we can take this to a less sophisticated or novice

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## Q & A

user. And we'll include extra benefits. For example, games should be preloaded on OS/2 next year.

**Beyond games, you're talking about apps. But last year, software associations said something like \$200 million in OS/2 applications were purchased against \$3.5 billion for Windows apps. There continues to be very little incentive for ISVs to develop for OS/2.**

*OS/2 Professional* has as much history in this area as I do. It's a hard one. But one way to get ISVs is by having volume. At the same time, you get volume by having ISVs. I think this product will help immensely. And a lot of ISVs are starting to rethink OS/2.

**Name one.**

Lotus.

**Does Lotus have anything to say about the development of OS/2 products?**

In time, they'll invest heavier because of this product.

**Warp will easily and quickly open up the Internet to millions of Americans with one-button simplicity. How important is the Information Highway to Warp's success?**

*Time* magazine ran a front page on the Internet and the world read it. In our testing, people said, "I've always wanted to get on the Internet but I don't know how."

**There was also a piece on NBC's *Dateline* about kids learning to make bombs from on-line services. We know for a fact that IBM has a certain amount of quiet trepidation about suddenly opening up the heartland of America to the Internet.**

It's not my place to judge. It's like some video games. I don't know that I want my children playing video games where people are chainsawed. But these are some of the hottest games going. So I'm not going to sit here and decide that IBM won't do that in OS/2. The Internet has some inherent problems that people are going to have to manage.

**What is IBM's squeaky clean responsibility in helping unsuspecting families keep their kids out of very dangerous waters? Remember, there are screening methods for 900 numbers, for pornographic cable, and for all forms of mail and printed matter.**

I may be making it easier, but you still must pay to get on. A parent still has to make a decision. It's like TV. It is my obligation as a parent to understand what my children watch on TV. I think it's going to be the same thing with the Internet. I'm not callous,

I think it's an issue that we must look at but there is no way in the world that we can be the people who manage that for parents.

**Have you also given up this rather meaningless term 32 bit processing?**

Well, I'm not going to say I'm giving it up but it's not my emphasis.

**Let's talk about the most important question in OS/2: OEMs and preloading, including the IBM PC Company preloading OS/2.**

You will start to see the IBM PC Company preloading this fall. Not carte blanche in every model because we have driver problems and size problems. It will take us into 1995.

**Fine. What about the other major vendors such as Compaq, Packard-Bell, AST?**

All of them are extremely interested in preloading. It will take a little bit of success in the PC Company first. More importantly, if this launch is successful and we create enough energy, major OEMs will say "Hey, there really is a market for this." Then, yes, they would like to have an offering other than Microsoft.

**If an OEM decides tomorrow morning to preload OS/2, how long would it take to hit the retail chains?**

It really depends on each manufacturer and what model, and the device drivers. Toshiba laptops and Compaq could probably convert a third of their line within a month. But many hardware companies only refresh once every six months. If you miss a refresh, they won't put it in until their next refresh.

**Has the six millionth copy of OS/2—including site licenses—been sold yet?**

We are approaching it, probably by this fall.

**And then IBM is hoping for a 45 percent growth beyond that with the launch of Warp?**

We haven't booked the plan for 1995 yet.

**You've said Windows users are your first market target. And then DOS users. So the OS/2 community is third on your list.**

Wrong. The OS/2 community is always number one on my list.

**Thank you Mr. Lautenbach. ♦**



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## ◆ OS/2

### OS/2 WARP Version 3

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### Back Again/2-Pro

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### Backmaster 1.1 for OS/2

MSR Development

BackMaster is the 32-bit backup program that supports popular QIC 40/80 tape drives. New features include auto verify, file save sets, DOS/Windows/OS/2 data exchange, enhanced disaster recovery utilities, support for high speed adaptors and parallel tape drives.

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### BakupWiz

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BakupWiz is the OS/2 solution for backup to SCSI tape, Bernoulli, syquest, magneto optical, and tape auto-changers. Full support for EAs, long names, and networking is included. Your OS/2 system partition can be completely restored.

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### Cheyenne ARCSolo for OS/2

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### NovaBack for OS/2

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### Nutshell

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Nutshell for OS/2 is a quick and easy backup, restore, and re-install solution for all LAN, tapedrive, and laptop environments, including Novell 3.12, Trakker, and LapLink.

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### CPU Monitor Plus

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# The Second Annual OS/2 Professional Awards

OUR COMMUNITY HONORS ITS OWN

If ever there was an indication of the extent to which OS/2 and the community that supports it have come of age, it was the ceremony honoring the winners of the Second Annual OS/2 Professional Awards.

The event was the highlight of the Opening Reception of the OS/2 Update, held in Atlanta in mid-September in conjunction with Network+Interop. Framed by huge triple video screens in the Grand Ballroom at Atlanta's World Congress headquarters, a series of IBM and OS/2 luminaries followed a tuxedo-



Michelle Lennane of DeScribe accepts the Best New Application Award.

clad Edwin Black to the microphone to address the hundreds of attendees.

One of the most head-turning events of the evening was the award of the Outstanding IBM Executive award. After more than a year of sharp attacks on

## THE WINNERS

*The awards honored contributions to the development, marketing and promotion of OS/2 during the previous 12 months, and the creation of new hardware and software products that amplified OS/2's utility. Receiving awards were:*

### BEST NEW APPLICATION

DeScribe 5.0 (DeScribe, Inc.)

### BEST NEW DEVELOPMENT TOOL

CA-Realizer (Computer Associates)

### BEST NEW OS/2 APPLICATION— READER'S CHOICE

Ami Pro for OS/2 (Lotus  
Development Corporation)

### BEST HARDWARE

Parallel Storage Solutions (tape backup)

### OUTSTANDING IBM EXECUTIVE

Louis V. Gerstner Jr. (CEO)

### CORPORATE COMMITMENT AWARD

One Up Corp.

### TEAM OS/2 AWARD

Timothy Sipples

### MARKETING AWARD

SofTouch Systems, Inc.

### MEDIA AWARD

Howard Stern

### OS/2 PRO OF THE YEAR

Tony Pereira (President,  
Clear & Simple Inc.; founder,  
OS/2 Vendor Council)

IBM's management and marketing philosophy, Black presented the award to IBM CEO Louis V. Gerstner Jr. "We have always been, and will continue to be, critical boosters of IBM and its OS/2



Lois Dimpfel, PSP's Vice-President of Software, accepts the Outstanding Exec award for Louis V. Gerstner Jr.

products," Black noted. "But one obligation of being a strong critic is to give praise when praise is due. Lou Gerstner is turning IBM around—and he's placed OS/2 at the center of his market strategy. On behalf of the OS/2 community, we believe that should be acknowledged." Lois Dimpfel, IBM's vice president, communications products, networking software, accepted the award for Gerstner.

Another head-turner at the award ceremony was the performance of an original three-minute synthesizer composi-



tion entitled "Drama at Interop." The piece was composed and performed by none other than Peter Hayes, the director of marketing communications for IBM's Personal Software Products division and an acceptor at last year's awards ceremony. The audience loved it! *OS/2 Professional* is looking into making the piece available to the community as an OS/2 theme.



Editors Brad Kliwer and Edwin Black congratulate Marvin Hilt of PSS, Best Hardware winner.



Michael Kogan announces the Corporate Commitment and Best Hardware awards with his usual gusto.

Nine others who have helped build the OS/2 technology and the OS/2 commu-

nity were also honored. Among them were Clear & Simple's Tony Pereira, Timothy Sipples of Team OS/2, One Up Corporation, DeScribe Inc., Lotus Development Corp., SofTouch Systems, Computer Associates, and Parallel Storage Solutions. A surprise winner was notorious radio personality Howard Stern. The "shock jock" was recognized for his frequent mentions of OS/2 on the air.

The awards, each a handsome rough sculpted glass trophy with the recipient's name and the magazine's logo sandblasted into its midst, were presented by Black; Editor Bradley D. Kliwer; Contributing Editor Michael S. Kogan; Dimpfel; IBM PSP

Marketing Director Wally Casey; Wally McCourt, OS/2 product manager at SofNet Inc.; and Pereira.

"Ceremonies like the OS/2 Professional Awards ceremony at Network+Interop highlight the vibrancy of the OS/2 community at the grassroots level," said Dimpfel.



Richard Dews accepts the Corporate Commitment Award for One Up.

The ceremony was graciously sponsored by PSP, with able supervision provided by Verna Wright and Paul Wilkinson. ♦



Tony Pereira, OS/2 Pro of the Year, and Sharon Manuel of Footprint enjoy the opening reception buffet.







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Prior to the official release of DeScribe 5.0, new orders for the product, as well as a growing backlog of upgrade orders, had already placed the company in a position of viability with an eye toward expansion.

When, after five years of investment and heavy losses, I assumed control of DeScribe on May 1, 1994, DeScribe “RESET” to a new and challenging direction. We drew a minimum revenue line in the sand, we cut expenses by more than 50% without the loss of a single R&D or support staff member, we raised prices by 50% and we did away with marketing shams including MSRP and the Competitive Upgrade. Those decisions, while initially questioned by many, have changed the entire financial outlook of DeScribe for the better.

In my last technology company, System Integrators, Inc., a company founded with less than \$500 and sold 15 years later for \$128 million while listed on the New York Stock Exchange, I established a set of strategic principles which were created to serve SII’s newspaper customers throughout the world. SII’s clients included the *Los Angeles Times*, *The Washington Post* and the *Financial Times of London*.

DeScribe has now adopted a number of these principles as its own:

- Continuing revenue is a necessary and sufficient prerequisite for continuing support.
- Intellectual property is the most important asset of a technology company. It shall be protected.
- The primary responsibility of a technology company is to design technically superior products.
- Premium technology solutions command a premium price.
- Profitable operations are the basis of a healthy business.

A number of these principles may seem foreign in the give-away addicted “Shrink Wrap Software” business. However, for me, they are a tried and true formula for success. Therefore, DeScribe has adopted them. Each of these ideas is intended to provide strength and longevity to DeScribe. They are intended to protect both DeScribe’s and its customers’ investments while providing the highest level of technology and customer support.

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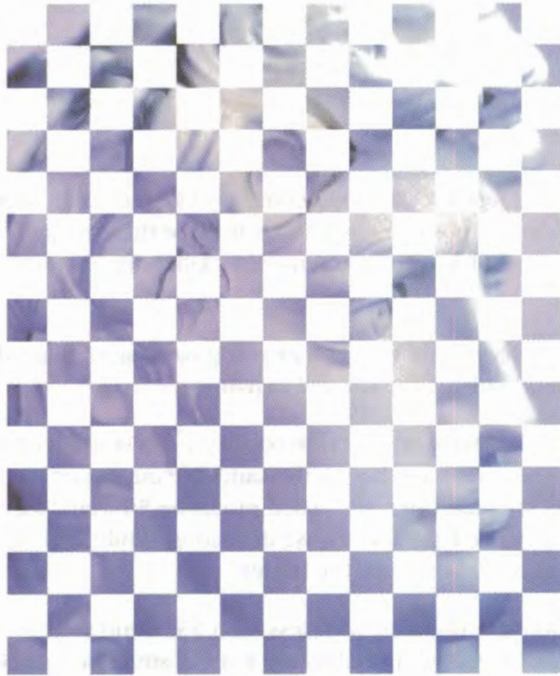
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James P. Lennane  
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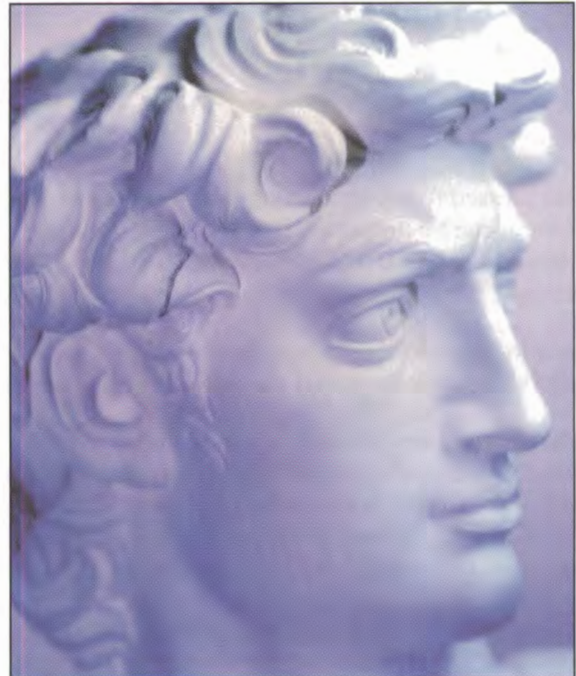
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# PRePping for Prime Time

BY MICHAEL S. KOGAN

**W**ith its new generation of Warp-based OS/2 versions and the consolidation of its PC product lines, IBM is beginning to show signs of understanding how to reduce the gap between the consumer market's requirements and its offerings. In fact, in one of the most positive indicators yet, Big Blue was able to turn on a virtual dime to avoid going in precisely the opposite direction with the delivery of its first PowerPC-based systems.

IBM's Power Personal Systems (PPS) division rushed to gear up manufacturing facilities and build PowerPC 601-based systems. Unfortunately, it did so without defining a target market, and therefore without examining how well its systems would work in that market.

Surely IBM should have learned by now that creating a new system standard for PCs is more than just building some new RISC boxes with PC parts and making them available. Remember the PC AT? It arrived in 1984 but it wasn't until 1987 (OS/2 1.0) or 1990 (Windows 3.0) that we got system software that exploited the architecture. And although 386-based systems appeared in 1986 it wasn't until four years later (Windows again) or six (OS/2 2.0) that we had system software to exploit 32-bit x86 systems.

Through the spring and summer, PPS was tooling up to repeat history. Until late September, IBM was slated to deliver this month its first systems based on the PowerPC Reference Platform (PReP). The typical entry level system is expected to be powered by a 66 or 80mhz PowerPC 601 microprocessor and include a PCI bus, integrated SCSI-2 support, and 16mb of RAM.

With AIX and Windows NT as the only operating systems initially available, the first PReP systems would not be very viable mainstream solutions. AIX PReP systems are nothing more than low-end Unix workstations, and Windows NT won't do any more

for PReP systems than it does for x86, MIPS, or Alpha. OS/2 for PowerPC and a version of Windows NT that supports the Chicago feature set are expected no earlier than the second half of 1995.

But these initial PReP PCs, whenever released, would suffer from more than a lack of competitive operating systems. Even if OS/2 for the PowerPC and Chicago NT were ready today, the new systems are also underpowered, a radical departure from today's PC architecture, and are not price/performance winners compared to what's available now and in the near future for the x86-based market.

## Underpowered

At the same clock rate, the PowerPC 601 and Pentium-based machines perform comparably in integer operations, while the PowerPC 601 is faster in floating point operations. Thus, a native 32-bit application on a PowerPC 601 likely will not have a significant performance advantage over the same application compiled for the Pentium unless it uses a lot of floating point arithmetic (see *The Chip Wars Revisited*, Eye on the Market, June).

Both Apple's PowerMac and Windows NT for the PowerPC use Insignia's SoftWin emulation software, and on an 80mhz PowerPC 601 with 16mb of RAM both run DOS and Windows programs at approximately the performance level of a 25mhz 486SX. That's not fast enough to entice current x86 customers to change platforms, particularly when compared to the blazing performance of a 90mhz Pentium or 100mhz 486DX4 with 8mb of RAM.

To make the PReP PC attractive as an alternative to the x86-based PC, both a faster PowerPC 601—at least 120mhz—and emulator improvements are needed. But there's no point in waiting: by the time Chicago NT or OS/2 for the PowerPC is ready for delivery, PReP PCs based on the PowerPC 601 chip will be obsoleted by the much faster PowerPC 604, and perhaps also the





## EYE ON THE MARKET

PowerPC 615, which will offer much faster on-chip x86 emulation.

### Why Take This RISC?

IBM decided it would seize the PowerPC marketplace by forcing a break with the past. (Remember PS/2 and Microchannel?) Thus, it hasn't simply dropped a PowerPC microprocessor into the existing architecture and then added the glue and emulation needed to make today's hardware and software work compatibly—a situation that would allow system performance to evolve over time. Instead, PReP defines a completely new system architecture, and one that requires significant investment on the part of OEMs. PReP PCs represent a far more striking shift than does Apple's incremental, evolutionary strategy for exploiting RISC technology within its existing product line.

Since the new, Lou-driven IBM is supposedly market- and bottom-line oriented, a question or two suggested themselves to those of us who watch IBM: Who will buy these PReP systems? Why should today's x86-based user migrate to this platform? What value does a PReP PC provide compared to an x86 PC? Why should OEMs support it? And why should ISVs target what promises to be a low volume market?

The PReP package certainly is not equipped to compete with OS/2 or Chicago clients running on a fast 486, Pentium, or any of the Pentium-class chips coming from Cyrix, AMD, NexGen, and IBM Microelectronics. And we already have symmetric multiprocessing solutions on OS/2, AIX, and Windows NT for scaling up performance on servers. IBM couldn't possibly sell even a half million of these PReP systems in their first year.

So why would IBM trip over itself to ship these PowerPC 601 systems this fall? What was the rush?

The pressure to ship came from the IBM division that is rapidly inheriting from PSP the label "rogue division": Power Personal Systems. PPS perceives that every day its manufacturing line sits idle, it is losing more money. In fact, there are probably already a number of PReP PCs sitting in warehouses gathering dust. It should be no surprise then that PPS was the group pushing to offer Microsoft's Windows NT preloaded on the PReP PCs, and is also the primary source of pressure on IBM's PSP to hurry up and finish OS/2 for PowerPC.

Once the 601-based PReP PCs shipped, PPS would get valuable experience shaking the bugs out of a new PC architecture and would have a foundation on which to build more powerful



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systems in the future. Also, since IBM does not share revenues with Motorola on the PowerPC 601 chip (they do share on the 603 and 604), this was an opportunity to cash in on a few PowerPC 601 sales. Finally, IBM needs platforms on which to run the OS/2 for PowerPC beta.

### PreParing For Tomorrow

The internal struggles among PPS, the PC Company, and PSP were causing IBM once again to act like a many-headed hydra. From the vantage point of the PowerPC, IBM looked like a company that wasn't yet clear on how hardware and system software could best contribute to its bottom line, or what future role it should play in the desktop RISC market.

It is therefore a very positive sign that IBM has decided to delay the release of the PowerPC computers, as one spokesman put it, until a "critical mass of applications" is available. Those applications, needless to say, will run under OS/2 for the PowerPC.

So let's offer up a cheer-and-a-half to Lou. But this is only a start. In the near term IBM should dissolve its Power Personal Systems division and move its products into Richard Thoman's PC Company. IBM doesn't need two different PC companies, and this move would allow IBM to focus less on internal issues and more on the market. IBM must also acknowledge (at least to itself) that regardless of the operating system situation, this hardware is not ready to compete in the mainstream PC market, and put in the necessary work to identify a market in which the PReP PC will be the immediate leader. Similarly, there should be no rush to finish OS/2 for PowerPC yesterday, regardless of its functionality. Gold code in the second half of 1995 is not a problem, since that's when a sufficiently powerful PReP PC will be available for OS/2 to shine on.

For better or worse, this is not Mr. Watson's IBM. This IBM seems finally to be able to identify strategic approaches to competitive markets. But it still seems unable to figure that out for any given market until it is in imminent danger of being driven out of it.

That hasn't happened yet with the PReP PCs; IBM has lots more money to spend on that market, and it is finally taking a proactive stance. The PReP systems IBM planned to roll out this month are not ready for prime time. But their PowerPC 604 and 615-based successors, running OS/2 for PowerPC, promise finally to unleash the power in PReP. ♦

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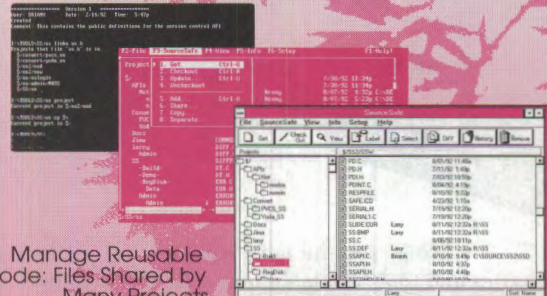
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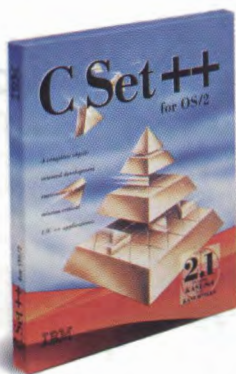
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HANDS ON

## The Best Laid Secrets...

Bet you didn't know that Alpha Four has been available as a native OS/2 application, did you? Alpha's database development efforts offer a lesson about operating system choices, as well as adding another OS/2 application to the list of native productivity tools.

BY GEOFFREY HOLLANDER

**T**o me, it was one of the best kept secrets in the world. I'd used Alpha Four for years—in fact, since version 1.1 (4.0 is the current release). I thought I knew a lot about the database and the company. But it wasn't until I vented my frustrations to a friend about the lack of a decent OS/2-based xBase product that I found out about Alpha Four's native OS/2 version.

Yes, the DOS-based relational database has an OS/2 cousin. But Alpha Software has been keeping the product under wraps, offering it only to those cognoscenti who knew enough to ask for it.

Alpha Four rose to prominence by supplying a user friendly front end to dBASE files, taking a standard file format from a programmer's system and transforming it into an interactive application more in tune with a Lotus 1-2-3 or Paradox user's perspective. The user creates relational links between files by pointing. Through scripting and application development tools available in the base package, a novice user can develop customized systems without the programming expertise required of other database packages (although the developer must have some programming aptitude).

Alpha Four presents these features without a GUI front end, demonstrating that an easy-to-use system does not necessarily require graphics overhead. While it will not supplant existing professional-level tools available for OS/2 (such as IBM's DB2/2 and Microrim's R:BASE), Alpha Four provides a powerful entry-level tool for understaffed departments struggling to keep abreast of the increasing data tide.

Why make a product in an OS/2 version you're not going to market? According to Selwyn Rabins, co-chairman of Alpha Software, the answer is simple—and testimony to the power of the operating system. The company has used OS/2 as its development platform for Alpha Four DOS for about five years. Alpha

Four OS/2 was just a serendipitous side effect.

"Many of us here became seriously interested in OS/2 around the time version 1.1 was released," recalls Jim Gerow, a senior programmer at Alpha Software. "By the time version 1.2 hit the streets, we had begun to use it as our primary development platform."

The key advantage that shaped the development platform choice may also persuade you to check out the OS/2 version: the improved memory management model. For the development team, this meant more efficient debugging (DOS debuggers were badly constrained by too little memory). For the end user, more efficient memory models mean more reliable operation and better performance.

As in any platform move, however, memory model issues alone cannot justify a switch. Your tools must work as well or better in the new environment than in the old. Alpha Four's precursor, Alpha Three, was developed using the Microsoft BASIC Compiler. As a result, not only did memory limitations affect program execution and debugging, but the BASIC compiler itself was affected. Alpha Three was, of necessity, designed to work "in pieces." But the more complex requirements of the new product didn't lend themselves well to this approach. In fact, the design requirements for Alpha Four made integrating the fragmented pieces of Alpha Three a top priority.

The Alpha programmers thus were ready to switch to more efficient C language programming as part of the transition. According to Gerow, the companies that were producing C compilers at the time—including Microsoft—also were struggling with the DOS memory limitations.

The answer fell into place with OS/2. The APIs and system calls in the OS/2 compilers were so similar to those in DOS that very little conditional compiling was required—most of what



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works in this "universal" text-mode environment also works in DOS.

While these were the major factors in the initial choice to use OS/2, its true multitasking and virtual machine capabilities opened new testing avenues to the development team as well. Running the multi-user version of Alpha Four in several sessions concurrently, for example, simplified the testing process for Alpha Four's file locking and sharing integrity. "Basically," Gerow added, "we had created a virtual network within which all of our preliminary network testing could be done. Because of this, we only had to tie up the main network and extra development personnel during the final verifications."

Over several versions, Alpha Four has evolved into a DOS application in which art imitates life. The program has become so comfortable and efficient at using a 32 bit memory environment that the new 4.0 DOS release loads a third party 32 bit memory manager before it loads itself. As a result, the program has more than doubled its processing speed over version 3.0.

The performance improvements become apparent in the OS/2 environment, too. Consider these tests, run on a 486/33 ISA PC using different operating system configurations. The scenario: add a 40-character field to each of 370,000 records in a mailing list. Running in DOS, version 3.0 required 9 minutes, compared to 7 minutes running in an OS/2 DOS session. Better yet, the native OS/2 version of Alpha Four 3.0 cut the run time to 5 minutes. The results were much closer with version 4.0. The OS/2 DOS session actually ran neck and neck with OS/2, both turning in times of 3.5 minutes, thanks to the 32 bit DOS libraries.

As of this writing, it is not clear whether Alpha Software intends to market the latest OS/2 revision widely. When I first contacted Alpha Software (prior to 4.0's availability), company officials stated that 4.0 would be the first OS/2 version generally offered to the public by Alpha Software. But at press time, company officials were saying that the best way to get the native OS/2 version of Alpha Four is to buy it directly from the company.

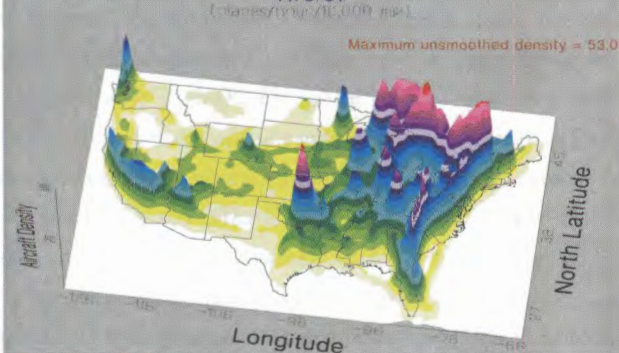
While the two versions of Alpha Four turned in nearly identical performance (and there is no user interface advantage since both versions use an identical text-based design), there are some advantages to a native OS/2 application. The OS/2 version uses system resources more efficiently, thus helping background tasks

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run faster. Furthermore, if you use a performance tuning utility (such as Priority Master), task priorities may be set only for native OS/2 applications—all DOS and Windows applications run at the lowest priority.

So the next time you find yourself wishing someone would make a simple, powerful, fast, native OS/2 database, remember, there's been one all along. It's just that now the secret is out. ♦

*Geoffrey Hollander is the principal of Mail Pouch, a computer service bureau based in Lake Oswego, Oregon that serves the direct mail marketing industry. His hardware and software reviews have appeared in several publications covering both the computer and direct mail industries.*

## AT A GLANCE

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In *The Plastic Software Library* (Hands On, August), we reported incorrectly that the OS/2 Professional CD-ROM contains the OS/2 2.11 Service Pak. In fact, the CD-ROM contains documentation for the Service Pak, but not the upgrade itself. We apologize for the error.

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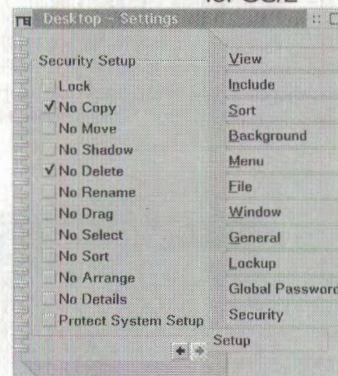
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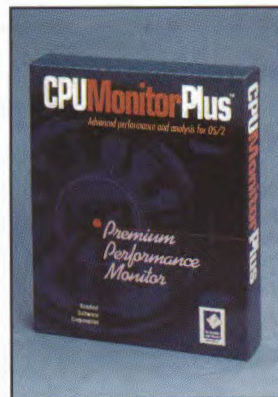
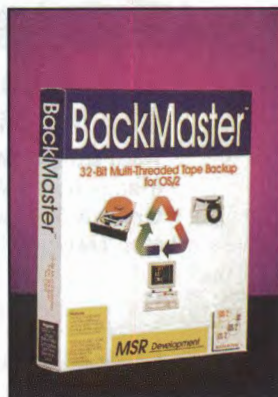
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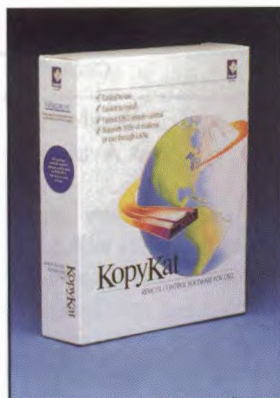
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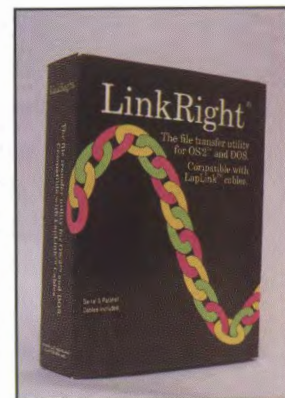


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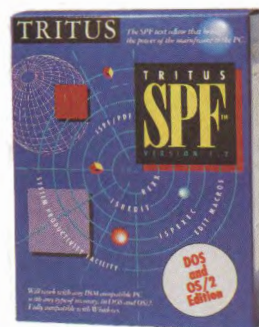
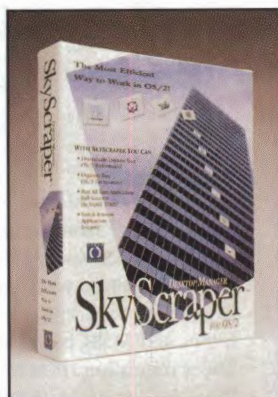
## ◆ LinkRight by Rightware

LinkRight is a parallel port and serial port file transfer utility made especially for OS/2. The package includes a PM version, an OS/2 command line version, and a DOS version. Maintain EA's and long file names. Supports HPFS and FAT files. CRC checking to insure accurate transfers. Compatible with LapLink cables.



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Product News for the OS/2 User

# SCOOPS

## Kermit Lives!

We've complained about the dearth of industrial strength communications software for OS/2. One answer, for those willing to cope with a command line, is C-Kermit 5A(190) for OS/2, produced by Frank da Cruz at Columbia University.

If you've worked with computer communications for any time, you're familiar with the Kermit file transfer protocol. It was touted a few years ago as the ultimate in secure, error-corrected data transmission and provided unparalleled support for those MIS direc-

tors stuck with 7-bit data transfers. But the popularity of PCs has kept a competing protocol, Z-Modem, in the ascendancy.

Da Cruz argues that's a mistake for real-world communications, in which one cannot assume a clean line and no congestion or buffering problems. To cope with that situation, this month he will release the latest version of C-Kermit, a full-function high speed 32 bit OS/2 app.

This new version of C-Kermit supports direct as well as dial-up serial connections up

to 57,600bps with flow control, TCP/IP Telnet, DEC Pathworks, and NETBIOS and Named Pipe peer-to-peer LAN connections, and offers all the usual terminal emulations, and lots of context sensitive help.

C-Kermit is a command line, rather than PM, application. That's a problem if you're dealing with users who need WPS consistency, but a plus for robustness and efficiency, since it reduces the user interface load on the PC considerably.

Scripting is offered either in

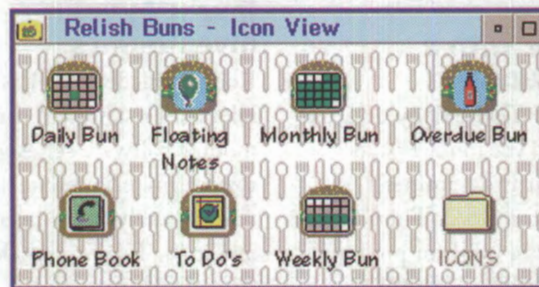
REXX or C-Kermit's cross-platform scripting language. The Kermit protocol itself is available, and typically can be found resident, on virtually every computing platform in use today, from DOS and Unix machines to IBM mainframes and VMS computers.

C-Kermit can be ordered for \$45 from Kermit Development and Distribution, Columbia University, 612 W. 115 St., New York, NY 10025, (212) 854-3703, fax (212) 663-8202, email [kermit@columbia.edu](mailto:kermit@columbia.edu).

## New Products

### Relish the time

Sundial Systems Corporation last month began shipping Relish 2.2, the company's first SOM-based PIM for OS/2. This new version includes a collection of Workplace Shell objects called "buns" (where else does one put relish?). These objects are various ways that information can be viewed, copied, moved, or stored, providing point-and-click access to calendars, phone books, and schedules. The Type-to-Search function provides searching on demand—



*Sundial's 32 bit PIM takes a light-hearted approach to information management. The icon bar makes access quick and easy.*

just start typing (a client's name, for example) and the software will scroll to the appropriate phone book entry. Other new features include an optional icon bar for one-click access to func-

tions and a "floating notes" feature that allows an entry to float from one day to the next without being locked into a specific time frame.

The single-user version is available to registered 2.1

users for \$22; new users pay \$89. The company plans to ship a network-ready version by the end of this month. Sundial Systems Corporation, 909 Electric Ave., Ste. 204, Seal Beach, CA 90740. (310) 596-5121, fax (310) 598-9851.

### LinkRight update

Rightware Inc. has upgraded LinkRight 1.1, its file transfer package for OS/2. LinkRight is a multithreaded 32 bit parallel/serial port utility that enables users to transfer files from one locale to

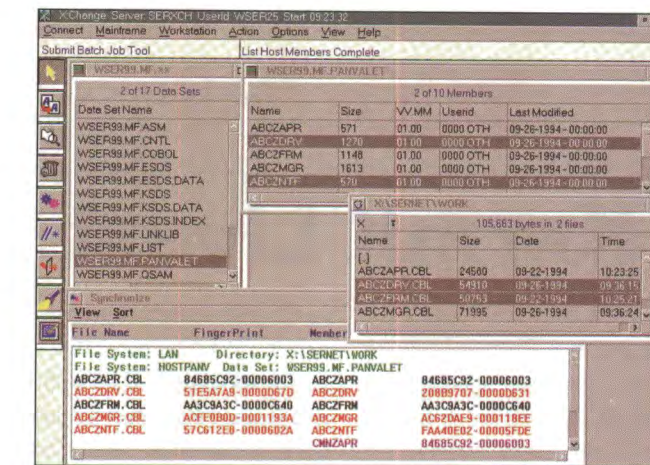


## MARKETLINE

another. The upgrade features an enhanced parallel port transfer rate of up to 2mb/minute and the LRCLONER, which enables users to clone entire OS/2 partitions. The product includes CRC checking, uses compression to shorten transfer times, and supports long file names and HPFS. The package includes DOS, OS/2 PM, and OS/2 command-line versions. LinkRight 1.1 is compatible with LapLink cables, and can be purchased with cables or as a competitive upgrade. Approximate street price: \$100 with cables, \$70 without. Rightware is offering a free upgrade to registered users of version 1.0. Rightware Inc., 15505 Villisca Terrace, Rockville, MD 20855. (301) 762-1151, fax (301) 762-1185, CompuServe 71033,3517.

### Talk to your mainframe

If you're looking to automate your PC and LAN-based access to a mainframe computer, Serena International's latest release may be just what the IS manager ordered. X:Change 1.1.1 is a cross-platform file management, file and data transfer environment that automates the conversion and transfer of mainframe file formats to HPFS and FAT files on a LAN or PC. The new version incorporates a scanning facility that enables users to locate and display specific text strings within mainframe and PC files. Once located, files



*X:Change provides a central interface for accessing and managing mainframe data from Po/LAN platforms.*

can be edited or transferred using drag-and-drop to a targeted platform. X:Change's key feature is a client/server-based architecture that supports multiple OS/2 clients.

Users can purchase X:Change for between \$250 and \$400 per workstation, depending on volume. Serena International, 500 Airport Blvd., 2nd floor, Burlingame, CA 94010. (415) 696-1800, fax (415) 696-1849, email: info@serena.com.

### Editor with a GUI face

Rimstar Technology, Inc. has released version 2.1 of its RimStar Programmer's Editor for OS/2. The editor provides a GUI for programmers working with OS/2, Windows, and NT, and features a configurable, multi-threaded multidocument interface. It supports a variety of keyboard mapping options, facilitating migration from other editors.

RimStar features language specific syntax coloring capa-

bility, hex editing, a full C macro language, a C source browser, and keystroke macro recording. Macros programmed in the C macro language are portable across both versions of the editor. The editor for OS/2 lists for \$299 and the Windows/NT version sells for \$199. RimStar Technology, Inc., 91 Halls Mill Rd., Newfields, NH 03856. (603) 778-2500, fax (603) 778-2408.

### Invest in your investments

Roberts-Slade, Inc., has released FirstAlert, a three module software series geared toward financial brokers, traders, analysts, and general investors. The first module, ChartistAlert, provides quotes, news, ticker tape feeds, charting, and stock analysis. RiskAlert is designed specifically for options traders and includes "what if" analysis, value sheets, matrix reports, and several other sophisticated features. The final module,

SignalAlert, includes stock filtering and group management capabilities, multiple criteria alert processing, and the ability to schedule and coordinate multiple search tasks based on market conditions. The product is available on a yearly lease or can be purchased outright. Monthly lease rates start at \$195 per month, and the purchase price starts at roughly \$5,000. Yearly service fees are additional. Roberts-Slade, Inc. 619 North 500 West, Provo, UT 84601, (800) 433-4276, fax (801) 373-2775.

### This X server hums

Ontario-based Hummingbird Communications Ltd. has released eXceed/OS2 2.0, a 32 bit X server. This X11R5-compliant server enables OS/2 users to connect to and display applications from Unix and VMS computers. The product is bundled with an OS/2 X Window System Development Toolkit that includes a library of tools for developing X Windows applications for OS/2. Other features include full screen display capability, multi-window mode, custom icon support, and international keyboard support. eXceed/OS2 2.0 also provides the user with a multiple client startup utility that automatically establishes multiple host connections. Cost: \$545. Hummingbird Communications, Ltd., 2900 John St., Markham, Ontario, Canada, L3R 5G3. (905) 470-1203, fax (905) 470-1207.



# News

## Global Village acquires SofNet

Global Village Communication, Inc., until recently a supplier of Macintosh-only communications products, in August purchased SofNet, Inc. for \$13.5 million.

The move was the first step in Global Village's strategy to expand its stable of communications software and hardware products to include support for DOS, OS/2, and Windows. Global Village will continue to develop for the Macintosh, but also plans to pursue R&D for PC applications based on

SofNet's existing product line.

According to Global Village Spokesman Ray Bayer, the two companies have been rolled into one with Global Village CEO Neil Sevin retaining that post. Bayer said that SofNet's executive management team, with the exception of the vice president of engineering, has been "transitioned out." The SofNet name will also be phased out, probably by year's end, and the Marietta, Georgia headquarters will remain in place.

The SofNet product line includes FaxWorks for OS/2

and FaxWorks Pro for Windows.

## Ambra reborn!

Down but not out, IBM's Ambra personal computer line is alive and well north of the border in Ontario, Canada. According to an Ambra spokeswoman, the IBM subsidiary is once again under the direct control of IBM Canada. Previously, Ambra computers were distributed in Canada by ExperComp Services Limited, itself a wholly owned subsidiary of IBM.

Ambra took a body blow in February of this year, when its

European operations were shut down, and a seemingly fatal one again in August, when IBM decided that the experimental mail order computer line was not meeting expectations here in the U.S. Yet according to company officials, the Ambra name has been selling well enough to bring it back into the fold as the fifth line of IBM PCs sold in Canada. Confident that the Ambra name will continue to sell, the company recently christened a new high-end 100mhz notebook that it is selling directly through IBM Canada. ♦

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Circle #7

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**Basic Requirements:** OS/2 2.1 & DB2/2 Single User or C/S software are required.



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Circle #229



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**PLUS**  
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**NEW**

**VX•REXX  
VERSION 2.1**

- Over 2 dozen objects, including CUA'91 Containers, Notebooks, Pop-up Menus and more
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- Context-sensitive help
- Powerful drag-and-drop programming techniques simplify programming
- Develop professional multi-threaded, multi-windowed and drag-and-drop enabled applications
- Code reusability through section sharing
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- Advanced interactive source-level debugger
- System Object Model (SOM) based object manager
- Package your application as an EXE or PM macro for royalty-free distribution
- Integrated console window support simplifies migration of existing REXX programs

**Watcom VX•REXX** is an award winning, easy to use visual development environment for creating OS/2 applications with rich graphical user interfaces. VX•REXX combines a project management facility, visual designer and an interactive source-level debugger to deliver a very approachable and highly productive visual development environment.

### Design Applications Visually

Create rich graphical applications quickly and easily using the visual design environment. With the visual designer, you can graphically create CUA'91 Presentation Manager interface objects, quickly customize their properties, and easily attach REXX procedures using powerful drag-and-drop programming techniques.

### Integrated Development Environment

Build, test and debug your application without leaving the development environment. Then package your application as an EXE file or PM macro for royalty-free redistribution. The power of the integrated development environment and debugger can also be used with your existing REXX applications.

### Powerful Open Environment

Enjoy the simplicity of event-driven programming together with the global editing capabilities essential for professional project management. Watcom VX•REXX is open and extensible through IBM's object-oriented System Object Model (SOM) technology. You can access all standard REXX API's including DB2/2, because VX•REXX is based on the OS/2 2.x standard system REXX.

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Peter Coffee, PC WEEK, May 2, 1994.

"(VX•REXX) applications can be multithreaded and REXX is probably the easiest language in which to learn the OS/2 thread model."

Software Development, November, 1993.

"VX•REXX is a great tool; it's fun and productive." PC Techniques, Dec/Jan. 1994.



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Circle #100



*continued from page 31*

sure won't appear until January issues mailing in late December.

- Mobile users will be pitched everywhere they look: in-flight videos, airport kiosks, in-flight magazines, and via a targeted direct mail campaign.

- Infomercials featuring the electric David Barnes will run on Ziff's Technology Information Network. The Barnes video was shot around the world and shows OS/2 as a global solution. Locations include Kodiak, Alaska, where the entire town operates on OS/2; Moscow, where the ATM machines run on OS/2; Tokyo, where a 5-star hotel plans all its weddings using OS/2; and London, where the Metcalf Genealogical Society traces family trees using OS/2.

- Morning drive radio in major markets is also on tap.

- Augmenting the radio buys will be outdoor billboards. At least one billboard considered was blaring STOP GO STOP GO STOP. O&M would thereby link the frustration of rush hour traffic and the frustration of waiting for Windows.

The second wave of advertising is not completely planned.

### The Slip

Just weeks before the launch, however, the whole campaign became even more difficult. Why? First, Warp slipped. Final bug fixes and a Boca Raton development effort wracked by pressure, sleeplessness, and even physical collapse, meant that shrink wrapped boxes would not be ready by the October launch. As we go to press in early October, Warp hasn't even gone gold, missing its original planned Sept. 15 target. Warp isn't expected to go into manufacturing until just a few days before the announcement.

Second, at the 11th hour the product name itself was overruled. After months of intense debate about naming the product 3.0, 2.5,

**"Now we have a product that genuinely allows its productive capabilities to be used by anyone. It's usable and it fits the machines the masses really buy. It's a whole new ball game. And we're going to do it right."**

**Peter Hayes**

or something in between, IBM strategists conceived the simple name "v3"—that's a small v, no dot, and large 3. A plain looking logo was developed and kept under strict security.

The software box itself was just about to go into printing on Sept. 26 when PSP officials emerged with astonishment from a meeting in Armonk. Gerstner had personally overruled v3, and mandated the code name Warp become the commercial name as well. Remember Gerstner's background as a marketing driven CEO at Phillip Morris, where brand names such as Marlboro evoke whole image systems all on their own. Just after being hired, Gerstner asked someone why OS/2 couldn't be called something more catchy—such as Bronco. Many giggled. We did not. In fact, *OS/2 Professional* took a cue from that remark when we renamed SearchManager/2 as Bloodhound.

PSP executives had to go back to square uno and try to figure out if v3 would still have a place on the box. Some questioned whether OS/2 itself as a name would survive. As this is being typed, at noon, Sept. 29, all we know is that the name OS/2 Warp may actually appear on the box. v3 may also appear, but only as a smaller subtitle. Either name will be effective. But clearly, Gerstner and company are determined to conquer a whole new segment of mass market users. And if you're trying to convince them that OS/2 is faster than Windows, Warp conveys a helluva lot better than v3.

Despite the slips, moniker stress, and a thousand other glitches, PSP remained committed to the Oct. 11 launch. After all, it couldn't unschedule the satellites and the buffet. But the launch announcement and general availability will now be two separate dates—a throwback to the state of affairs pre-Ferengi. At press time, it appeared that some Oct. 11 TV commercials might air, as well as some in additional time slots. But the bulk of the advertising will not hit until Warp boxes are actually in stores, now thought to be in late October.



# Error Manager

Because some projects can't take a lifetime . . .

*"Error Manager earns its keep by saving you time and aggravation when you need to debug an OS/2 or C++ program."*

—Bradley D. Kliewer, OS/2 Professional



Error Manager is a runtime API debugger and production code monitor. EM finds elusive API errors and enables testers and production managers to monitor software in real user environments. EM works with fully optimized code and does not require symbol information of the debug kernel -- yet it will tell you which line in your source is causing the error!

Traditional tools such as debuggers are of little use when your software is out in the field. Reproducing a problem is frequently a time consuming and frustrating process. Automated testers can tell you that something is wrong, but they can't tell you what, and they can tell you where. We can!

Error Manager tracks the OS/2 Toolkit API functions. Errors can be ignored, logged to a file, pipe, or our PM viewer. Additionally, EM can notify your window handle or callback function, allowing even novice OS/2 programmers to implement a sophisticated, event-driven error handling strategy.

EM works with all 32-bit OS/2 C/C++ compilers.

Error Manager simplifies all phases of the development cycle. Whether you use the logs to evaluate the performance of your beta, implement event-driven error handling or simply use the provided PM Viewer as an additional debugging tool, you will gain tangible benefits the first day you use Error Manager!

And you won't be alone. Here's what some of our clients had to say:

"I found 15 problems in a program I thought was fine. I don't know whether to be happy or sad!"

"Finding bugs was never this easy! Error Manager paid for itself the first time we used it."

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- † Error Manager is simple to use:
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Reinforcing the media campaign will be more than a million direct mail pieces targeted at games users, mobile users, and home users. "Everywhere people look," says Casey, "they're going to see OS/2."

Learning to become an effective marketer overnight hasn't been easy. "We have never done anything so difficult," admits Pete Hayes, PSP's marcom director. "And at this late date we're still learning a lot we need to know."

Hayes adds, "IBM takes a mean rap for its advertising. It's so easy to forget what OS/2 has been to date. Regardless of anything that has been, it has *not* been a product for the masses. We learned that from Ferengi. People had a hard time installing it. They were throwing up their hands in frustration. It just didn't fit the marketplace. We asked OEMs to preload it and they refused. Even IBM wouldn't preload it.

"Now we have a product that genuinely allows its productive capabilities to be used by anyone. It's usable and it fits the machines the masses really buy. It's a whole new ball game. And we're going to do it right."

## Second Column: Public Relations

It's imperative that an effective publicity campaign accompany all the marketing. IBM knows it is no match for the Microsoft PR machine. Moreover, IBM publicists have had to counter a deeply entrenched press bias against OS/2 because the product was so poor and the press corps easily saw through PSP's fairy tales.

As recently as last year, OS/2 was the poor PR step child of IBM. Two valiant guys, Rob Crawley and Keith Lindenburg, worked day and night without secretarial support to respond to inquiries. "It's lack of bandwidth," Crawley once complained.

Last year, PSP hired Allison Johnson as press relations manager and she began building a department. To beef up the effort, press consultant Brodeur & Partners deployed a squad of public relations types—led, ironically, by Lindenburg, who stepped through the revolving door to service the PSP account.

For the launch of Warp, the Brodeur crew has left their families back home in Boston and New York for nine weeks to live out of suitcases and hotel rooms in Austin.

Johnson has also worked to put some polish on the OS/2 press machine. She recruited filmmaker Robin Mortarotti, a veteran of Apple and Francis Ford Coppola, to create the videos for OS/2 starring PSP's personal tornado, David Barnes. "Press conferences are boring. I had to inject something exciting," says Johnson.

# OnCmd<sup>®</sup> xBase for OS/2 ... A Winning Combination!

OnCmd harnesses the power and the speed of OS/2, enabling you to develop new applications or convert existing xBase applications, such as those developed in FoxPro<sup>®</sup>, Clipper<sup>®</sup>, and dBase<sup>®</sup>.

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OnCmd can quickly convert your xBase applications to run directly in OS/2's 32 bit Presentation Manager. This minimizes development time and preserves your current xBase investment. Text applications are automatically converted to a native Presentation Manager application that is both multi-user and network capable. With simple code changes, you can add buttons, check boxes, and drop-down menus to give your application more functionality.



### Applications Development

OnCmd's screen painter, client-server facilities, "event driven" programming, and Dynamic Link Libraries (DLL) all add to the development power that you need.

### Client/Server Ready

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OnCmd is a performance winner! No windows emulation overhead. Disk requirements less than 1 MB. Installation under 5 minutes. In addition, it typically indexes large databases twice as fast as the competition in half the disk space. For more benchmark details, call or email us.

## ON-LINE

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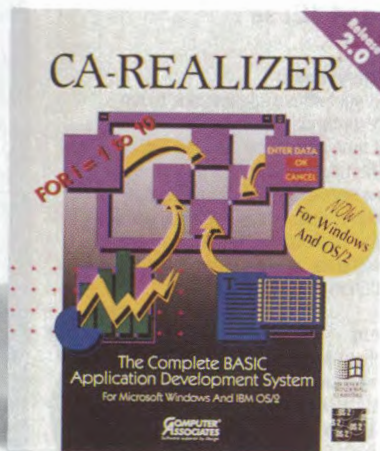
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# Two for OS/2

(and Windows Too)



## CA-REALIZER 2.0 for OS/2 & Windows

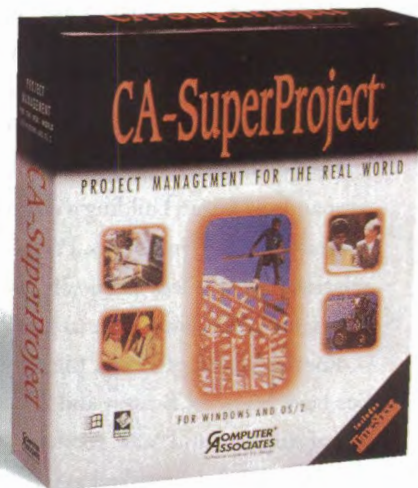
**CA-Realizer** is the first truly accessible approach to creating GUI applications. Using a structured superset of BASIC, you can quickly and easily create complete OS/2 and Windows applications without adding third party DLLs or learning about events, state-based systems, application cooperation, device control, and all of the other new techniques and complexities introduced by the other GUI programming systems. If you can create a program in DOS, you can create a program in OS/2 and Windows with CA-REALIZER. No other product provides this level of shielding from the nuisances of GUI programming while still delivering the ability to write complex, powerful applications. A visual form designer, over 280 clip art icons, a visual report writer, an integrated debugger, and Programmable Application Tools combine to make CA-REALIZER a must have for any serious corporate, professional or end-user developer.

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Trying to turn around PSP's image among reporters, Johnson created the PSP Media Relations Hotline, an 800 number that is answered in a "War Room" located just steps away from Lautenbach's office. Housing a collection of computers, fax machines, and in-house joke posters, the War Room keeps tabs on all media developments. It also creates an atmosphere that mentally prepares the staff for the bruising battle to come for Warp in ink and on the air.

Johnson is one of the most dedicated professionals in the business. She works well into the night. Unfortunately, the more successful Johnson and her team become, the more inquiries and press relations they must manage. They keep adding staff, but they continue drowning. Worse, no matter how responsive Johnson and her staff are, they can't control PSP's headstrong executives, who not infrequently break appointments and allow important media opportunities to pass them by.

Yet a quick response PR team is essential for the Warp campaign. If PSP does succeed in suddenly turning on the masses, the calls and opportunities will multiply.

It has a ways to go. As a test, we recently contacted both PSP media relations and Microsoft's public relations firm, Waggoner-Edstrom. We gave each a half hour to fax us a press release to fill some space we said had opened up unexpectedly in this October issue. Waggoner-Edstrom responded within moments and sent a whole slew of Windows 95 materials. PSP promised—but never sent anything. In fairness to PSP, we subsequently gave them several genuine deadline tests. They responded to each as required.

The entire press operation is now under the baton of PR Director JoAnn Sager, who joined the company in the spring. Among her tasks is finding "feet on the street"—that is, qualified people to work for her. She has the budget. But even with the talent in hand, unless Johnson and company get more cooperation from PSP executives, Warp PR will not keep up with plans for the product's new broad acceptance.

## Third Column: The Channels

All the advertising and PR will be useless if IBM can't get tons of Warp into the retail channels. Thanks to PSP Director of Sales John Osborne, Big Blue has learned a lot about stimulating the channels. OS/2 users will remember 2.0 in 1992, which was launched with great fanfare but couldn't be purchased in stores. Then came 2.1 in 1993, which also launched with great fanfare.

# Help Desk Software Comes of Age . . .

HODstar Supporter provides your support staff a platform to track LAN Server resources and customer/employee calls. These two functions are indispensable when integrated into a single facility.

HODstar Supporter is this single facility.

Your administrators determine what server information goes into HODstar Supporter's profiles. Help desk staff then use those profiles to support your end-users.

Profile data can be stored anywhere on your DB2 network! Or use our database!

Profiles can be loaded individually, or automatically using a separate loader module.



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- Extremely fast 32-bit implementation, and nothing but data does over your network!
- Instantly view full profile for all LAN Server resources relating to a customer call, from printers and drives to different network types!
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- Automatic call alarming!
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But the stores didn't receive Borg stock until long after the fanfare died away.

Late last year, though, the retail turnaround became clear. OS/2 for Windows not only shipped on time, it was all over the store shelves *before* the launch announcement. Hence, all the Ferengi fanfare led to immediate sales. Osborne had a lot to do with that.

For Warp, IBM is planning an exotic channels campaign including large store dumps, aisle endcaps, and a strong, visible point of purchase campaign. Buyers won't be able to miss it. Moreover, the channels activity will be global. IBM will use its worldwide connections to help that along. In Japan, for instance, OS/2 is already a major retail contender. Warp will expand the momentum.

Conscious of just how important a strong presence in both the superstores and corner stores is to reaching the mass market, PSP executives are busy thinking up ideas to capture the fascination of retail executive and store managers across the nation. One idea, considered but nixed, was to deliver Chicago-style deep dish pizzas with the message: "This is all Chicago has to offer." Another nixed idea was delivering hundreds of umbrellas blown backwards—another disparaging allusion to Chicago. Get it? Windy City ... Chicago.

Because the situation changes from moment to moment, the exact channels plan was not ready at press time. But if IBM has its way, the stores will be stocked once the shooting begins.

## Fourth Column: OEM Preloading

IBM has long understood that OEMs will preload OS/2 not to be nice to the OS/2 market, but only in response to market demand. In the current pre-Warp climate no computer manufacturer—not even IBM—is going to increase its costs or risk market share by preloading OS/2—they believe it to be a difficult and little used operating system. And they are right.

But Warp changes all that. It smokes Windows and makes any 386, 486, or Pentium a more versatile, powerful, and therefore more competitive machine.

One key goal of the Warp campaign is to stimulate market acceptance to the point that the OS/2 logo on a home or office computer will actually be an incentive to buy. The PC Company will lead the way with the new IBM Aptiva home screamer, which in the first quarter of 1995 will feature OS/2 factory preloaded. Finally!

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**W**elcome to the OS/2 Poll, *OS/2 Professional's* new monthly reader opinion feature. Every month from now on, we'll be seeking your opinions, preferences, and experiences on topics as varied as the marketing of OS/2 to the configuration of your network. Fax your completed survey back to us at (301) 770-1720 and we'll deliver your views directly to top IBM officials so they can hear your voice. Then, we'll publish the results in a forthcoming issue. Thanks for participating.

## SURVEY #2

We'd like to know your thoughts on pressing issues facing OS/2.

### 1. How much have you seen or heard about IBM's launch of OS/2 Warp Version 3?

- ☐ a great deal      ☐ very little      ☐ none (please move on to question #4)

### 2. Through which media have you seen or heard advertising about the new product?

(please check all that apply)

- ☐ TV      ☐ Radio      ☐ Newspaper      ☐ Magazines  
☐ Billboards      ☐ Direct Mail      ☐ Other (please specify) \_\_\_\_\_

### 3. So far, what has this advertising and publicity motivated you to do?

- ☐ Seek out more information      ☐ Decide to buy it      ☐ Nothing      ☐ My decision to buy was made *before* seeing any advertising

### 4. What do you think of the name, "OS/2 Warp"?

- ☐ I love it!      ☐ It's OK      ☐ I hate it      ☐ No opinion

### 5. What version of OS/2 are you currently using?

- ☐ Pre-1.3      ☐ 1.3      ☐ 2.0      ☐ 2.1/2.11      ☐ OS/2 for Windows

### 6. When do you plan to upgrade your OS/2 system to Warp?

- ☐ October '94      ☐ November '94      ☐ December '94      ☐ First half of 1995  
☐ Second half of 1995      ☐ I won't make that decision until the release of Windows95      ☐ I have no plans to upgrade to Warp

### 7. Which of the following features is the *most* important to you?

- ☐ One-button install      ☐ Internet access      ☐ IBM Works  
☐ Reduced memory requirements      ☐ None of these features is important to me

Please tell us about yourself:

### Do you subscribe to *OS/2 Professional*?

- ☐ yes      ☐ no

### How many employees are in your company?

- ☐ 1-5      ☐ 6-10      ☐ 11-50      ☐ 51-100  
☐ 101-500      ☐ 501-1000      ☐ 1000+

### Title (check all that apply)

- ☐ Chairman, president, owner, partner      ☐ VP, financial officer, treasurer, controller      ☐ Manager, supervisor      ☐ MIS/DP specialist  
☐ Communications/Network specialist      ☐ Microcomputer specialist      ☐ Systems analyst      ☐ Computer consultant  
☐ Programmer/programmer analyst      ☐ Computer educator      ☐ Professional  
☐ Other (specify) \_\_\_\_\_

### Which best describes your company? (check all that apply)

- ☐ Non-computer manufacturing      ☐ Computer manufacturing      ☐ Retail, wholesale      ☐ Computer-related services  
☐ Finance, insurance, real estate      ☐ Government, military, aerospace      ☐ Non-profit      ☐ VARS, consultants  
☐ Non-computer-related services      ☐ Communication, printing, publishing      ☐ Health, medical, legal      ☐ Education, scientific, R&D  
☐ Utility, transportation      ☐ Other (specify) \_\_\_\_\_

**Please fax completed survey to (301) 770-1720**



In Japan, IBM has done an effective job of getting OS/2 preloaded. That came about as a result of a huge channels success. If the U.S. channels campaign and Ogilvy & Mather's ad campaign work, and the pressure is kept up on OEMs, vendors such as Compaq, Dell, and Toshiba will jump on the bandwagon by next spring or summer. Laptop makers will probably be the first to sign up. Remember, the lead time can be up to six months—often longer—from the day OEMs decide to preload. So the better Warp is accepted this fall, the sooner 1995 might yield widespread default preloading.

## Warp Nine

There are a lot of things to be said about the Warp rollout. It is one of the largest and most ambitious product launches in computer history. IBM is not only launching a product, it is trying to counteract years of bad press, consumer rejection, industry angst, and eroded corporate self esteem.

But none of that gets to what this launch is about for us, or for the folks burning the midnight oil in Austin right now. Microsoft has controlled the computing desktop of the '90s—not by developing a superior product, but by superior marketing, with a few helping tablespoons of monopolistic practices thrown in.

We've believed in OS/2 for a while now, and happily we're far from alone. Of far greater import, there are people within IBM who see what OS/2 can be, and can do for the company.

On a more personal level, a bunch of good people in Austin and Boca Raton know their careers and one helluva product are on the line. You can hear the tension in their voices late at night. There's never enough time, never enough staff, never enough strength. But if PSP's Federation forces ever had a chance of blasting through Romulan defenses, it will be between now and next spring.

We've received about all the phone calls, faxes, confidential briefings, and deep background tips we can handle. We're convinced. The OS universe will be a different place three months from now. PSP will win. OS/2 Warp v3 will achieve mass market acceptance and by next summer it will approach the ten million mark.

But it won't be without a fight. So stand back and watch the horizon for the tracer fire. This is the war OS/2 has long been waiting to wage. The course is plotted and laid in, as Jean-Luc would say. Make it so! ♦

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Circle #83



## INPUT

*continued from page 12*

to run in direct I/O mode and ran with no problem. I have since been using the OS/2 side and don't have any desire to run on the DOS side.

There is only one disappointment that I can't believe an operating system like OS/2 has. That is, on the DOS side I can write a config.sys that prompts me whether I am in a laptop mode or a docking station mode, thereby loading only the necessary drivers. OS/2 doesn't do this and when the laptop is on the road I have to boot through multiple error messages because the machine is not docked.

I called IBM and they said, "Yes, we know this." What a help that was.

**Roger Nadler**  
*via the Internet*

*Thank you very much. I've never tried a Madge card on a ThinkPad docking station, but I'm pleased to hear that the company was*

*able to help you out. But a six hour download? My sympathies. You might want to consider one of the several 14.4 PCMCIA modems available. That would cut hours out of your downloads. — Wayne Rash Jr.*

### Greasing the skids?

I have noticed that nearly every personal computer periodical has run very favorable articles on Chicago. They all seem remarkably similar, and generally seem to imply that the system, when it arrives, will be the inevitable platform of choice for the desktop computer user.

Once can scarcely avoid the inference that Microsoft has arranged to "grease the skids" by wining and dining members of the press by flying them to Washington and presenting delightful "dog and pony" shows.

If true, then I have two questions. First, is this practice legal? If so, do the journalists at OS/2 Professional regard this

as an ethical practice? Secondly, if it is legal, and the competition does it (ethical or not), then why doesn't IBM do it, too?

**Richard Hodges**  
*via the Internet*

*The practice is, so far as we know, legal. Moreover, it is widespread—virtually every consumer oriented industry promotes its wares through free junkets offered to journalists. (IBM does so as well, but far less frequently than some other vendors.) News media outlets that are wise, principled, and well heeled typically avoid this ethical trap by requiring that they, rather than the companies in question, pay for all such trips. That is far more difficult for smaller, less affluent publications such as ours to do. We avoid such junkets, just as we avoid the ubiquitous nondisclosure agreements, which give a company control of the timing and form of the release of information about its products.—Alan S. Kay*

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version of the product has gone beyond a standard data-access method. Now you can access DB2/2, Sybase, Oracle, SQL Server, DDCS/2, Informix, SQL Base, Watcom SQL, Netware SQL, Btrieve and others with a single set of code that's portable to OS/2, Windows, NT and UNIX. SQL Objects++ supports direct vendor APIs, ODBC and IDAPI in addition to their standard interface. This multi-interface concept allows you to pick and choose what is best for your application and not be stuck with a "lowest common denominator" approach. Finally, someone listened to you.

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Circle #254



## INPUT

### Fuddy duddy

Since migrating to OS/2, I have been a voracious reader of *OS/2 Professional*. I am absolutely convinced that OS/2 is a remarkable product that has let me get more out of my existing hardware than I ever could under DOS/Windows.

Nevertheless, I continue to read reports, interviews, and editorial comments in *OS/2 Professional* that seem to promote feelings of fear, uncertainty, and doubt with regard to the future of OS/2.

I'm sure this sensationalism sells plenty of copies, but how can I feel justified in subscribing to a magazine I don't dare show to DOS users for fear that they may reconsider upgrading to a good operating system?

Let's leave the F.U.D. out of this otherwise excellent magazine. Sure IBM has been doing a poor job in promoting OS/2 and native applications in the retail market, yet then again, so has UNIX.

Please don't misunderstand. I really do want to see OS/2 become the dominant OS for the typical PC user, but it's time to stop anticipating that mistakes made in the past will compound into the future.

OS/2 has finally reached a critical mass and if a few companies such as Corel and WordPerfect haven't seen that yet, that's their loss and others will be there to fill in the gap just as Lotus has.

**Peter J. Albers**  
*via the Internet*

*If you are afraid to show our magazine to a DOS user, then you should also be afraid to show a copy of the Washington Post to anyone outside the Beltway. If you want a press release, call Austin. Corporate OS/2 readers are grown ups. More than that, they have a duty to be informed. They want the truth: credit where credit is due, and a keester kick when it's warranted. That's why when we*

*say an IBM product is great, as we have for Warp, people believe us.—Edwin Black*

### Can't wait

Each month I can't wait to get the new issue of *OS/2 Professional*. Please continue the good work. I enjoy reading it and sharing it with others, as do many people I work with.

**Alan Moseley**  
*via the Internet*

### CD support needed

I was thoroughly interested in Wayne Rash's article on CD-ROM drives [Connectivity, August], since I have been looking for a good solution for the last several months. However, I think one of us has been mislead. I have been working with them for the last two months trying to get OS/2 workstations (clients) to connect to the CD-View

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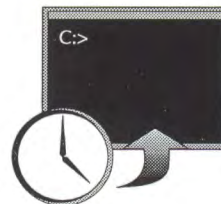
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## INPUT

server. According to Shawn Sease (Ornetix Tech Support), the latest Beta version was supposed to solve the "REQ1040: The requestor timed out waiting for a reply from server CD-View" problem. After installing the beta version, all OS/2 workstations still cannot connect. According to Shawn, it's not supported, and he doesn't know of any sites that are using OS/2 clients to connect to a CD-View server. He is routing the problem to development. Your article said "One of the easiest clients for OS/2 is CD-View..." So far, Ornetix Tech support and I have found it impossible! Your article said "Ornetix President Elias Shahvar says that the product is completely transparent to OS/2, so any (OS/2) user can use the CD-View just as he or she would use any NetWare file server." So transparent it seems, that my OS/2 clients can see it on an SLIST, but cannot

login or attach to it.

If you are using this product and are able to connect to it from an OS/2 client, please give me the details on how you installed it, and if you had to customize any of the options. (either on the client or server). I would really like to get it working. I'll pass any info along to Ornetix Tech support.

**Pam Coulter**  
via CompuServe

*Thanks for your letter. It may have something to do with the version of the NetWare Requestor for OS/2. I had no trouble getting the product to work. Unfortunately, I'm not able to provide any version information, because the OS/2 workstation used for the article was rendered inoperable in a recent system crash.—Wayne Rash, Jr.*

## Sniffing out new Bloodhounds

I've been following your articles on IBM's problems marketing OS/2 products. You may want to look into a product called Hyperwise, which is an IBM product for creating OS/2 help (HLP, INF) files. Relative to the competition, it's the best product for that purpose, and I don't think that IBM is putting much effort into it. There are many people on the OS2 forums that ask about authoring for the OS/2 Information Presentation Facility, and IBM does a poor job of promoting that product in those threads.

**Erik Ehlert**  
via CompuServe ♦

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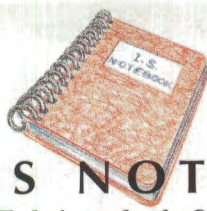
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# THE IS NOTEBOOK

*Tips and Techniques for the OS/2 Professional*

## Windows on the Move

BY CHRISTOPHER J. WEES AND BRADLEY D. KLIEWER

**O**S/2 users are not immune to the dreaded out-of-disk-space syndrome, a problem common to all desktop operating systems. Because of its dynamic disk space allocation, with the swapper, spooler and various system .INI files expanding on demand, OS/2 has several ways to warn you of impending storage space shortages. Messages range from an innocent PM window informing you:

Writing to spool file failed.  
Check disk space!  
Processing will continue.

to an annoying pop-up-once-a-minute PM window:

The INI file C:\OS2\OS2.INI cannot be written to disk. The updates are being held to automatically retry the operation, but will be lost if the system is shut down before correcting the problem.

to a "start sweating" OS/2 full screen text message:

**SYS1477  
WARNING!**  
The partition containing the swapper.dat file is full. You may lose data. Do not ignore this message. Select display help below for an explanation and possible recovery actions.

The two largest disk space consumers are the notorious SWAPPER.DAT file (often surpassing 25mb in size on our systems, which have 16mb of RAM) and WIN-OS2, the Windows subsystem, with its tens of megabytes of application code and DLL (dynamic link library) and TrueType font files.

For those still scrounging for more room after moving the swap file to another drive or partition (by editing the SWAPPATH setting in config.sys), the next step toward freeing disk space is moving WIN-OS2.

In case you missed it, here's the first step again.

### Move your swap file from drive C: to D:.

- Make a directory on your D: drive to hold the swap file. We suggest D:\TEMP, in which case the command would be MD D:\TEMP.
- Load CONFIG.SYS into your favorite editor or word processing program.
- Find the statement that begins: SWAPPATH=.
- Change the SWAPPATH to point to the new directory (for example, SWAPPATH=D:\TEMP).
- Shut down and then reboot the computer.
- Delete the old swapper file (DEL C:\OS2\SYSTEM\SWAPPER.DAT).

Moving the swapper file from the boot drive to a drive with more free space not only provides more room for growing .INI files, but gives the SWAPPER.DAT file room for opening more applications. Contrary to popular opinion, a large swapper file does not necessarily imply poor performance (or a need for more RAM). So long as swapper file access remains relatively infrequent, system performance will not

suffer. For example, idle applications (such as native OS/2 apps waiting for user input) may swap out to disk and remain there with little or no activity until brought back into use. Although these idle applications will add to the swapper size, they will not significantly increase CPU activity.

### Move your Windows programs from drive C: to D:.

- Get your OS/2 installation disks or CD-ROM; have them handy.
- Open the OS/2 System folder.
- Open the System Setup folder.
- Run Selective Install.
- Select **OK** without changing any settings on the first dialog box.
- Check the **Win-OS/2** box and select the **More...** button.
- Select Drive D (or the drive to which you want to move WIN-OS2) for installation.
- Make sure there is a check mark next to each of the accessories you want installed.
- Click on **OK**.
- Click on **Install**.
- Specify the source drive and directory as A:\ (or the drive you're using).
- Insert OS/2 disks as requested.
- With **Configure Desktop** checked, Click on **OK**.
- Select **Preserve Desktop** and click **OK**, then **OK** again.
- Insert display driver disk(s) as requested and click **OK**.
- Click **OK** to finish install.
- Shut down and reboot the system.



## THE IS NOTEBOOK

OS/2 has now moved the Windows subsystem. One final detail remains, however: moving the program files and subdirectories created by your Windows applications (such as Microsoft Word). Fortunately, the drag and drop feature of the Workplace Shell simplifies the process of moving groups of files. The next tip shows you how.

### Move folders (files and subdirectories) using the Workplace Shell.

- Open your Drives icon.
- Open the drive icon containing the folder of files and/or subdirectories you wish to move.
- If you want to move the folder to the

root directory of another drive, hold down the right mouse button while dragging the source folder onto the destination drive's icon.

- If the destination is another folder (subdirectory) on another drive, open the destination drive's icon, locate the desired folder, and drag the source folder onto it.

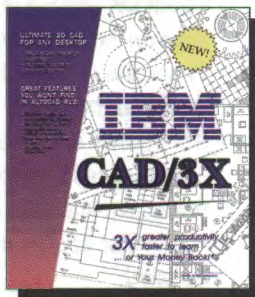
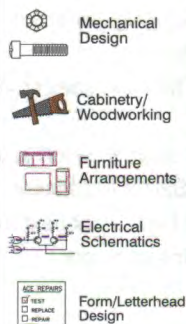
In the command-line oriented worlds of DOS and OS/2 windows, moving files from one drive to another with the **move** command is not allowed. However, the Workplace Shell lets you drag and drop at will. This same move operation performed from the command line would require an **xcopy** command with an include subdirectory switch followed by a series of delete and remove directory commands while traversing the

source directory tree with change directory commands—*where!*

### Move all remaining Windows program files to the D drive.

- Create the subdirectory D:\os2\mdos.
- Open the Drives icon.
- Open the icons for Drive C and Drive D (or your source and destination drives).
- Locate the OS2 folder in the Drive D window and click on the + to reveal the MDOS folder.
- Locate the OS2 folder in the drive C window, click on the +, locate the MDOS folder and click on the + to reveal the WINOS2 folder.
- Open the WINOS2 folder and highlight all objects inside it.
- Drag the objects from the WINOS2

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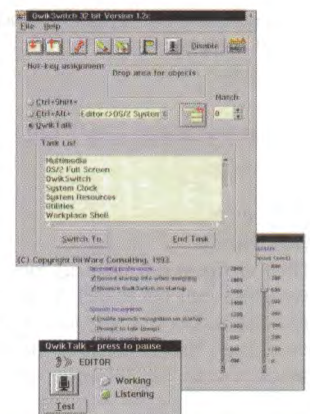
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## THE IS NOTEBOOK

drive C window onto the MDOS folder in the D drive window.

- Some folders (such as system) may not move because they already exist on drive D. You must manually open these folders and move the contents (following the same procedure outlined above).

This drag-and-drop move transfers all programs and associated files that you may have installed under Windows. We tested this method with a number of Windows programs and each adapted to the new drive configuration without further modification. You may, however, encounter some programs that require updates to an application's configuration settings or .INI files to reflect the new physical location.

The simplest way to edit an .INI file is by running the Windows System Configuration Editor: from the

Windows Control Program select **File, Run** and type SYSEDIT in the **Command line** box. From the configuration editor, you can search WIN.INI and SYSTEM.INI for references that should be changed from C: to D:.

### Create directories using Drag and Drop.

- Open the Templates folder.
- Using the right mouse button, drag a folder from the folders template onto the drive icon (to create a new directory in the root) or onto a folder (to create a subdirectory under the target folder).
- Click on the new folder (called "Folder") with the left mouse button while holding down the Alt key to edit the folder's name.

- Change the name of the folder.

For command-line mavens, it's hard to beat the succinct methodology of a MD (make directory) command. However, if you're already using the drive folder for other operations such as inter-drive moves, the drag and drop option may be more convenient. If you are using the new version of OS/2, you can pick up the template with Alt right mouse click. After locating the target drive icon or folder, right click on it and then select **Drop** from the menu. ♦

*Bradley D. Klierer is the editor of OS/2 Professional and the co-author of PC User's Guide to the AS/400, and Christopher J. Wees is Director of MIS for OS/2 Professional.*



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# PC User's Guide to the AS/400

by Bradley Dyck Klierer and Henry W. Klierer,  
Van Nostrand Reinhold, \$39.95, 238 pages

REVIEWED BY CHARLES CARRINGTON

**T**he title says it all. I just wish I'd had this book the first time I had to connect a PC to an AS/400.

This slim volume is densely packed with the critical information you need to know if you use a PC in an AS/400 environment. And the information you need is both easy to find and easy to digest.

*PC User's Guide to the AS/400* is targeted at several audiences and does a good job of catering to them all. For the advanced PC user, the book provides enough detailed information for you to make your initial connection to the AS/400, whether it's host or peer, and begin to make some real use of the new resources you have available.

For the IS manager this guide does a good job of describing the AS/400 design structure. It outlines its security, administration, job control, data storage, and available database programming languages. For the IS programmer, *PC User's Guide to the AS/400* uses clear illustrative programs to lay out key AS/400 concepts and features. For example, it compares OS/400 integral database design to the classic 12 relational database rules formulated by E.F. Codd, pointing out where the AS/400 complies and where (and why) it differs.

## PC Support is Key

PC Support, with versions for DOS and OS/2, is the group of programs that allow a PC to communicate with an AS/400. With it a PC gains access to AS/400 system resources.

PC Support on the AS/400 thus may be the corporate "killer app" OS/2 proponents have been searching for. And the reason is clear. It is OS/2 (with Communications Manager) that takes advantage of what the AS/400 has to offer. OS/2's multitasking

allows you to use the AS/400 as a server in a true client/server network in a way DOS just can't.

The DOS version typically is used for only a few basic activities, most commonly 5250 dumb terminal emulation and use of the AS/400 DASD as additional PC disk storage. The problem with PC Support under DOS is memory, or lack of it. The AS/400 communications overhead is memory intensive and the reduction in available RAM can make it difficult to run large

DOS programs—large spreadsheets, for example—at the same time. (The authors suggest using alternate boot configurations or starting PC Support from the DOS command line—which still commonly requires a reboot to remove the stack—to deal with these limitations.)

The OS/2 version, operating without the DOS memory constraints, offers much more flexibility. For one thing, it frees you from the 640k DOS memory trap so you don't have to make a choice between downloading your data off the AS/400 and running your spreadsheet. You can do both, at the same time, since (quoting the authors) "an OS/2 virtual

DOS session can leave 630k or more base memory while running PC Support, LAN software, and even other DOS programs in multiple windows."

*PC User's Guide to the AS/400* acknowledges the importance of PC Support by dedicating an early chapter to detailing exactly how to set it up and configure it. PC Support requires configuration on both the PC and the AS/400 and the authors detail both procedures, including the security access levels required, the physical connection type (token ring or Ethernet LAN, twinax, serial, x.25, etc.) logical and physical device naming schema, and more.







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## BOOKSTAX

*PC User's Guide to the AS/400* assumes you are an experienced PC user/administrator with no prior AS/400 experience who has just had an AS/400 delivered to your office. The boss stops by and says, "Get it running and get the PCs attached." If you are ever faced with such a task (and the six foot stack of AS/400 manuals) I hope you have the Kliewers' book on your desk. It could turn a near impossible task into a weekend's work.

This "AS/400 out of the Blue" assumption works well for the "how to" pieces but it may set the reader up for more than he or she wants to know about AS/400 administration. Most PC users aren't going to get anywhere near an AS/400's security administration, for example. But if you are a LAN administrator or a PC user trying to get connected to your company's existing AS/400, this knowledge might help you get your requests approved. It never hurts to know the local lingo.

Ditto with respect to AS/400 programming. But there is more relevance to users here, since once they're connected, almost all will have the ability to get to an AS/400 command line. *PC User's Guide to the AS/400* gives you the basics you need to find your way

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around—AS/400 single level store memory structure and libraries, various queues for output, messages, programs and commands, and the basics of file creation and manipulation.

This book does have its shortcomings. The brevity that makes it so easy to read also forces a lack of detail. It's not the source for troubleshooting PC-to-AS/400 connectivity, nor for becoming an AS/400 expert.

From the OS/2 user's point of view, *PC User's Guide to the AS/400* isn't as OS/2-centric as I'd like. Although written from the experienced PC user's perspective, it concentrates on AS/400

characteristics. More attention to OS/2 and Communications Manager specific configuration activities and features would have been welcome.

All in all, though, this is a fine book for anyone with a PC background who has an interest in the AS/400. ♦

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*Charles Carrington is a computer industry consultant whose current clients include IBM. He can be reached on CompuServe at 74361,1642.*

# CLIENT/SERVER SURVIVAL GUIDE WITH OS/2

By Robert Orfali and Dan Harkey Van Nostrand Reinhold, \$39.95, 969 pages

REVIEWED BY BRET AND BRIAN CURRAN

**R**obert Orfali and Dan Harkey are two truly amazing men—in our book, the kings of client/server. Their volume on client/server programming, *Client/Server Programming with OS/2 2.1*, has long been considered “near-Bible” material for the down-and-dirty technical programming crowd. Now their newer *Client/Server Survival Guide* can also claim a place right up there, but for a different, less technical audience.

The “Survival Guide” analogy is very fitting. This is a broad, useful book—one to help you get by. It doesn't delve deeply into any one subject; for example, the chapter on OS/2 versus DOS, Windows, and Chicago is just 10 pages long. Those 10 pages give you the highlights, but obviously not all of the details.

We've found the *Client/Server Survival Guide* for OS/2 valuable to keep on the shelf, both to re-read occasionally and as a reference. There's too much in this book to grasp at one reading; we still find ourselves learning something new every time we open it. And we've found ourselves returning to this book when faced with an interesting client/server question. Someone

was asking about AnyNet/2 the other day, and that's not a very well known subject in our center. We picked up the *Survival Guide*, and there it was.

OK, you say, but is this another dull book by a couple of guys from IBM? Not at all. As notorious as IBM product manuals are for being boring, Orfali's and Harkey's books are known for being as entertaining as you can get with this type of material. Who else would include a foreword by Zog the Martian and wonderful cartoons and “soapboxes”—shaded boxes in which the authors argue their opinionated points of view—throughout the book?

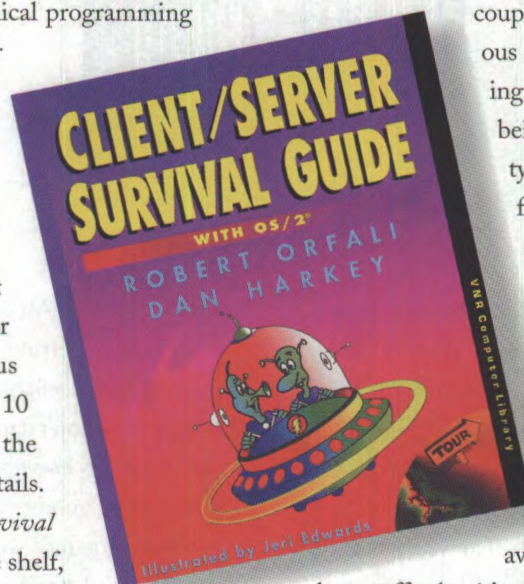
*Client/Server Survival Guide* is an excellent book, one we'd recommend (and have recommended) to anyone that has a sincere interest in learning more about client/server. It may take you

awhile, and a few readings, to absorb what it

has to offer, but it's exactly what we've been looking for to enhance our knowledge of OS/2 client/server issues. ♦

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*Working for IBM in Southlake, Texas, Bret and Brian Curran are part of a team that provides support and services for OS/2 and OS/2 application development customer projects.*







# Words to the Wise

BY JERRY POURNELLE

**W**riters still call them *manuscripts*, but publishers won't accept handwritten documents. No matter how you do it, making up the final submission copy of a big novel is a significant event.

It's also a chore, particularly since I try to send mail and faxes electronically and do little printing. *Beowulf's Children* by Niven, Pournelle, and Barnes runs 700 pages in Times Roman 12 point doublespaced, and generating copies for our U.S., British, and Japanese publishers was the biggest printing job I've done in a year.

The book is written in Microsoft Word for Windows 6.0, and foolishly I tried printing it from my big Cheetah 486DX2. I say foolishly because I'd forgotten that a big printing job brings Windows to its knees. I was soon reminded, recalling that the last time I needed a big print job I connected Percy, the PS/2 Model 77 running OS/2 2.1, to the LaserJet and piped my text over using OS/2 Advanced Server. OS/2 easily handles big print jobs, and because it runs background tasks, I use Percy for most of my electronic communications.

Alas, Percy was still running version 2.0 of Word for Windows. Conversion was out: it's a bad idea to have several versions of the master draft. Word 6 is a pig to install, but I could do it while I caught up on phone calls—computers aren't the only things that multitask here. I brought up the WIN-OS2 Program Manager... and disaster struck.

I don't know what happened. Maybe it was that we shut down while trying to install Creative's Sound Blaster weeks ago, because when I brought up Program Manager it flashed a window that said something about Sound Blaster Pro and locked up completely. Control-Escape did nothing. Neither did anything else, until the keyboard buffer was full and the machine did nothing but beep at me. Eventually I did Control-Alt-Delete, and the

whole machine reset—terminating the communications program running in background.

OS/2 doesn't reset quickly. Eventually I got it up, and there was Program Manager. I thought I'd better close it down and once again the system locked. No way to get to OS/2. This time I turned the power off entirely.

Next try I got to OS/2 itself, closed Program Manager from its icon, looked at Program Manager's settings, opened it at less than full screen, and from there everything went swimmingly. I used the net to copy Winword 2.0 to a glass disk in case I needed it again, did an upgrade install of Word 6 and let it create an "Office" program group, ran the Word 6.0a revision disk, used the old migration of Word to open it without Program Manager, and printed my document. Even with the crash and installation it took far less time to do three copies in OS/2 than it would have taken using Windows and its Print Manager.

The moral of the story is that IBM simply *must* let you get through a Windows crash and back to OS/2. Windows

in DOS traps Ctl-Alt-Del and lets you terminate a bad application without resetting the machine. With OS/2 it would be enough to have a reliable way back to the operating system. Until that happens I don't dare use OS/2 on my primary system. Writers *really* hate to lose text.

There's also good news. IBM is consulting Rich Heimlich on how to make games work with the next revision of OS/2, and they're actually listening to him. Meanwhile, the latest Warp beta has lots of new drivers and wraps around Windows for Workgroups, and while you can't use WfWG communications with it, Lantastic for OS/2 is supposed to do peer to peer better anyway. I'm also told that IBM is considering a low cost scaled down version of Advanced Server. ♦





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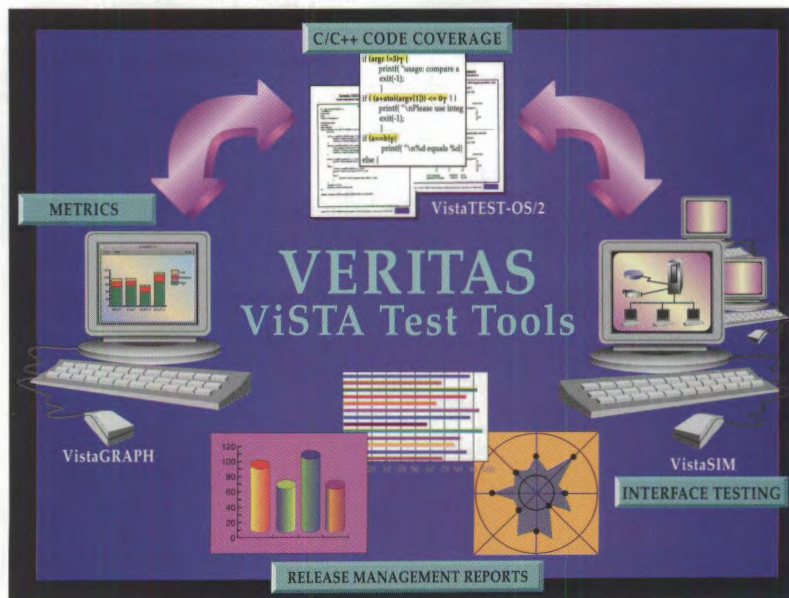


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